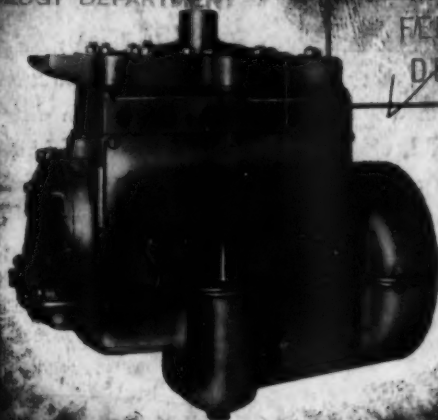


# The Autocar



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**SUNBEAM-TALBOT**

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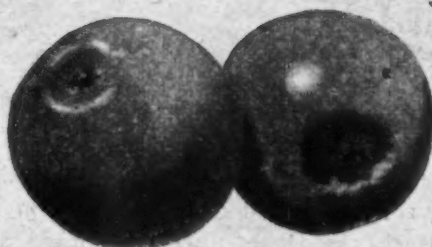
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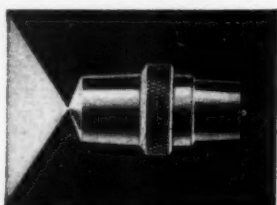
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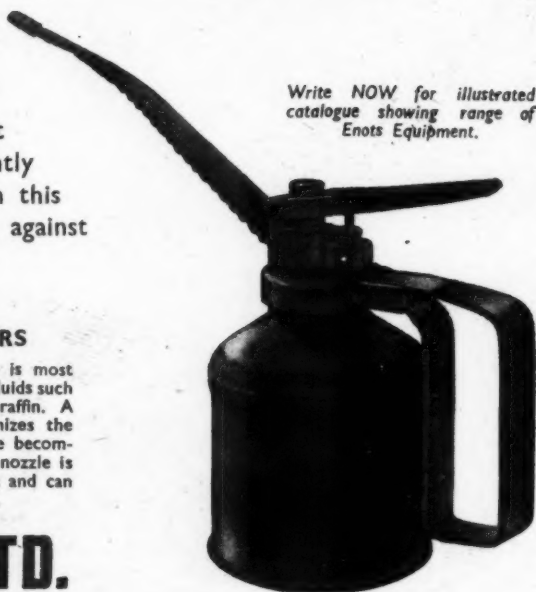
The Easiject Oiler is available in three basic standard models with 1,  $\frac{3}{4}$  and  $\frac{1}{2}$  pint capacity. Its force feed pump works efficiently under all conditions and our confidence in this Oiler is such that it is now guaranteed against mechanical failure **FOR EVER!**



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There is a Jagrose battery to suit every car. Quotations per return.

Very efficient. Fully guaranteed. Packing and carriage 1/3.

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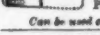
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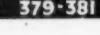
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Black, wing 3/6

Black, wing 3/6

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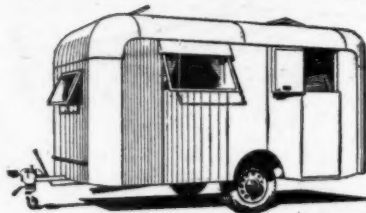
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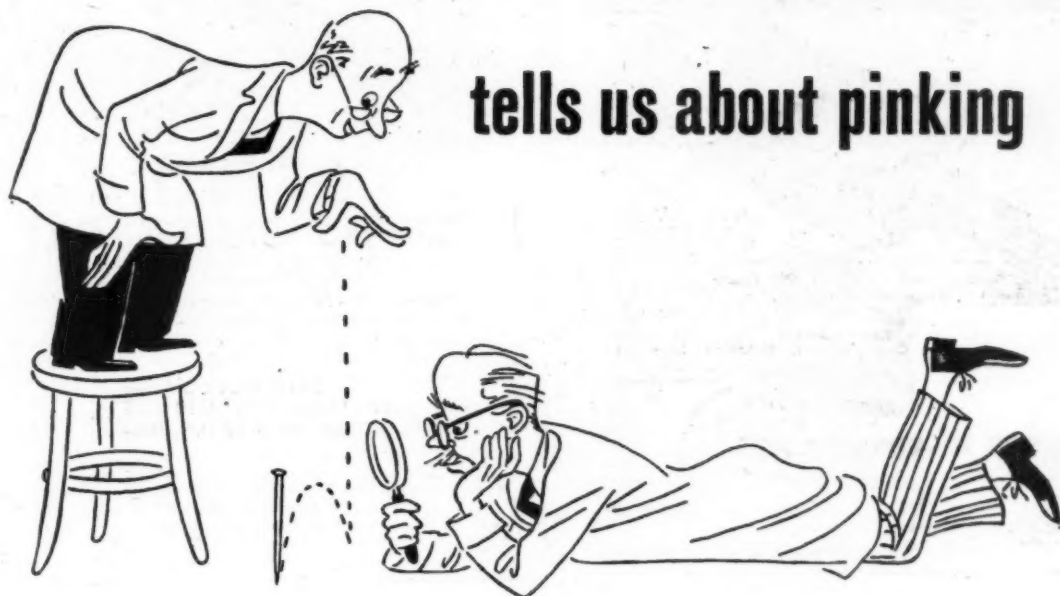
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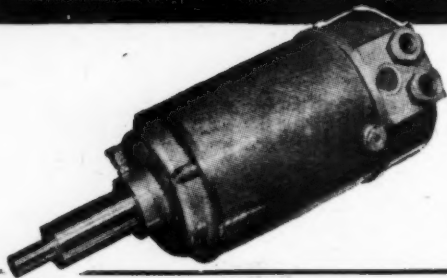
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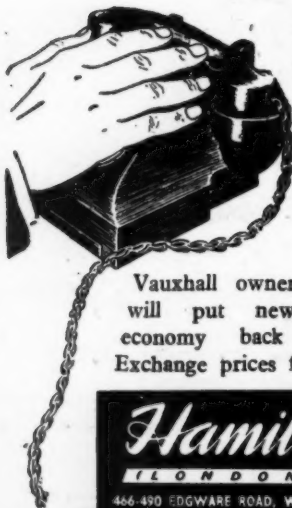


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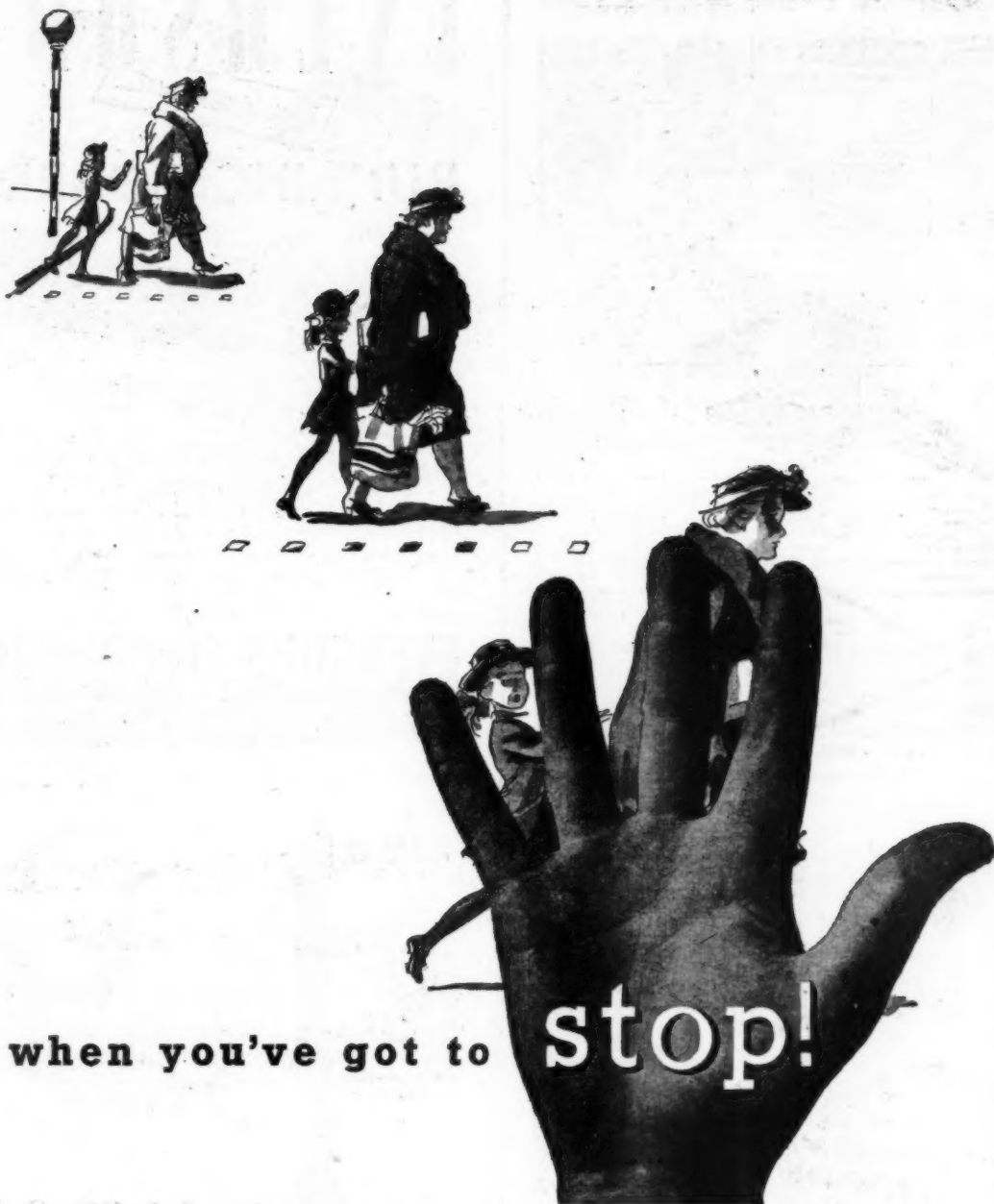
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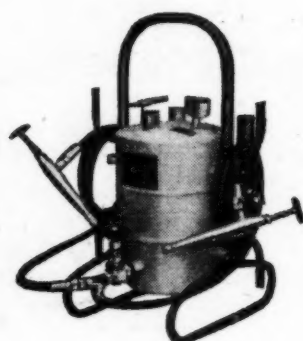
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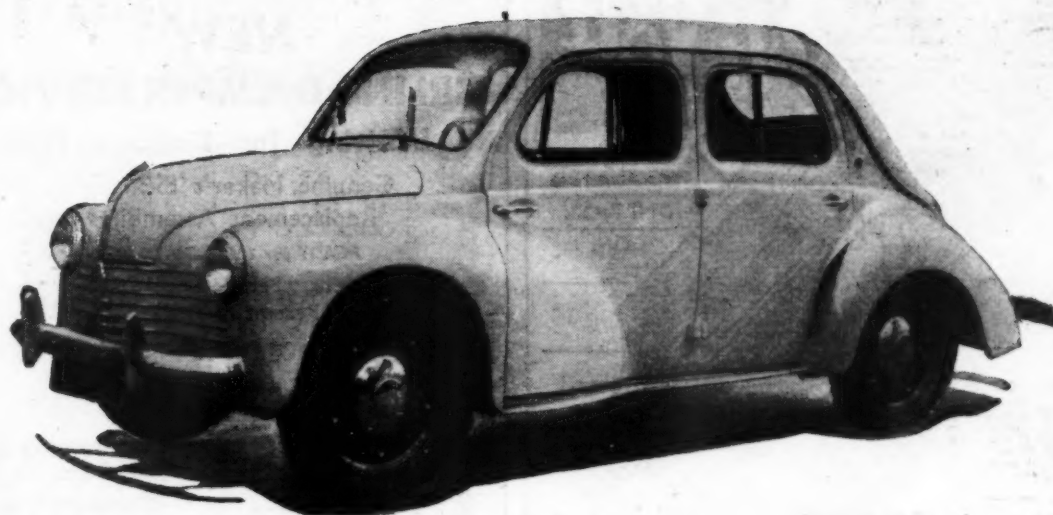
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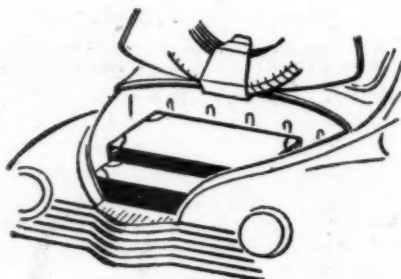
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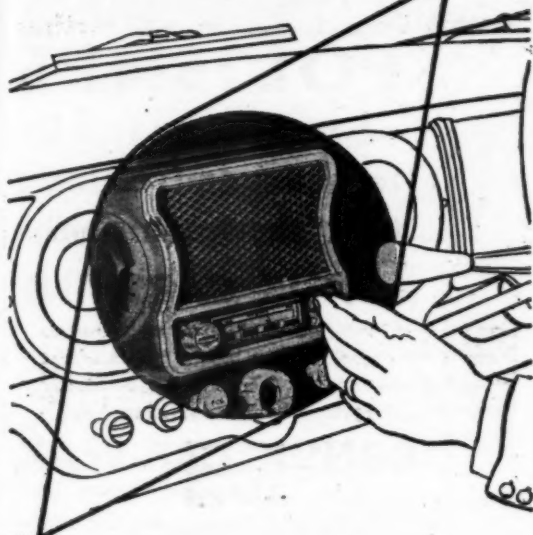
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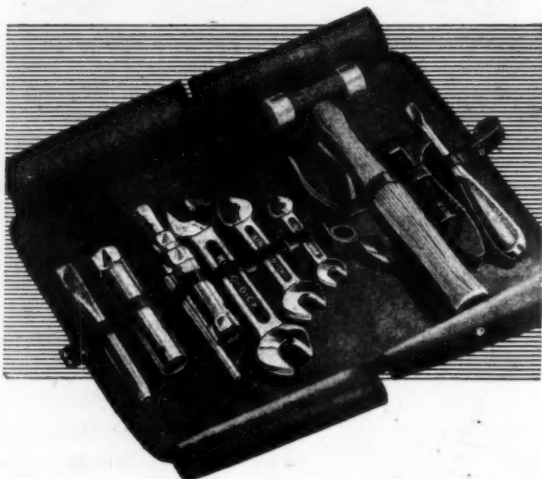
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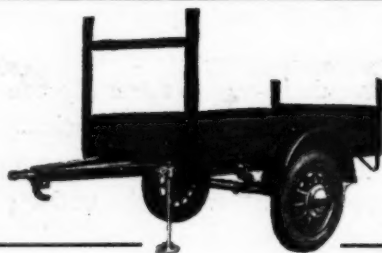
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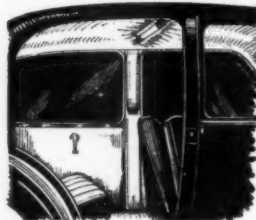
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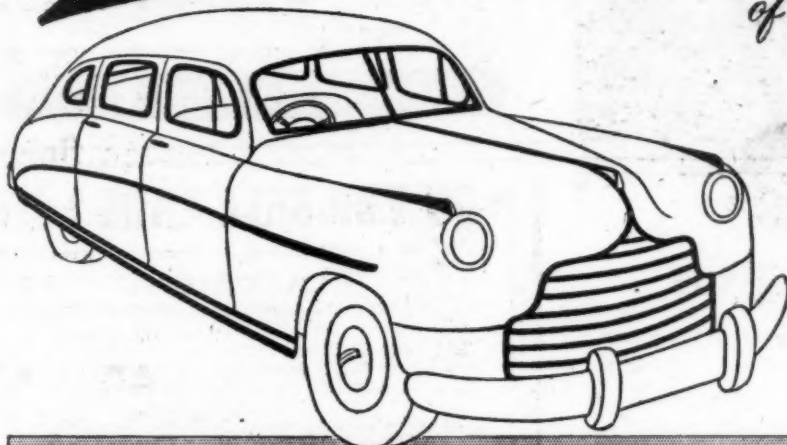
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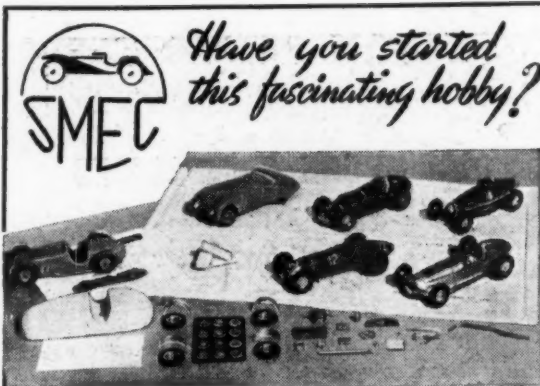
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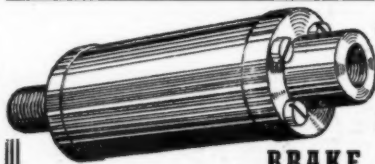
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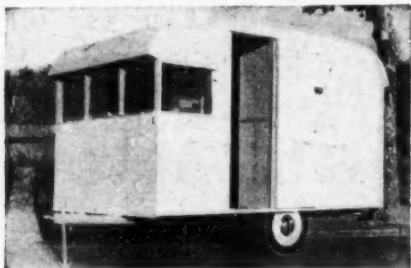
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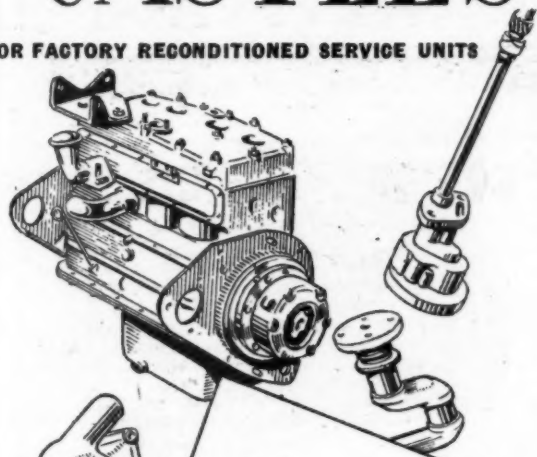
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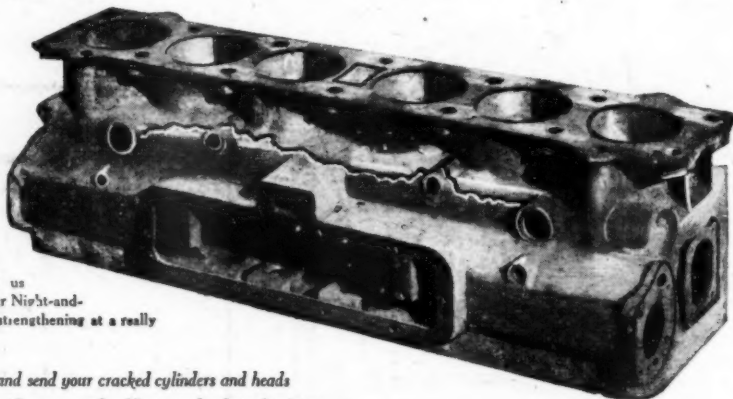
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# The Autocar

FOUNDED 1895

No. 2832

FRIDAY, FEBRUARY 10, 1950

Vol. XCV

## The Problem of the Cities

**T**RAFFIC congestion in London is familiar and inevitable, but few road users are aware of how alarmingly close the capital is to complete standstill. The distance is revealed in the fourth instalment of "Science and Road Traffic," which appears on the following pages. With half as much traffic again, speeds would be reduced to walking pace.

London's problem is the problem of all the big cities in a lesser degree, and the motorist has the best reason for being conscious of it, for he is most threatened. There are already advocates of the banning of cars from the central area of the Metropolis—a dismaying prospect of passes and permits, restrictions of liberty and economic loss for car owners. What is to be done about it?

For constructive suggestions it is necessary to look to America, where the car is accepted as the normal means of transport and where restrictive measures, of whatever nature, are vigorously opposed. In America, city authorities have long been aware that provision for motorists spells prosperity for the community, and have accepted the necessity for parking lots in central areas in spite of the high land values involved. The business community is likewise up to date, and a recent visitor to this country, who is a traffic engineer in Washington, D.C., called attention to the action of certain big stores in America which have established themselves on the outskirts of cities where land was available for parking.

In this country enlightenment is slower in coming—understandably, in view of the fewer number of cars per hundred of the population. But in the struggle for a higher standard of living, the car must be reckoned with, as has been found by many councils whose tenants are now agitating for the garage accommodation that was short-sightedly omitted from the plans of the housing estates which they occupy. The Englishman is car-minded, and it is advisable that he should remain so, for the motor industry is one of the main props of the country's economy, and props require a firm base on which to rest when the gales of economic fluctuation arise. When the new Government takes shape, it is emphatically in the motorist's interest that he should watch for signs that the problem is being tackled.

## Winter Starting

**W**E are forced once again to record our annual criticism of the uncertainty of the start from cold. It is admitted that petrol restrictions mean over-long periods in the garage for most cars, and that the violent temperature and humidity changes of the British winter spell starting conditions to legislate for which, year in and year out, designers are presented with a pretty problem; also that the present petrol is not ideal for vaporizing in cold weather. But in view of the difficulty of hand-swinging\*all but the smallest of engines, it is necessary to insist on 100 per cent reliability in this all-important matter.

No winter goes by without one or more of the staff of this journal having starting difficulty, in spite of cars which, it may be hazarded, are perhaps better looked after than the majority. Sometimes the cars are new; more often they show mileages in the neighbourhood of 20,000. Periodically, however, they fail on this vital point—and there should not be such failures.

The failure is, inevitably, blamed on the battery. This ill-used component finds on occasion that the turning of a cold engine against modern high compressions leaves it with insufficient voltage to produce a strong spark, with the result that the optimum firing point is passed and mixture condenses on the plug points, at which stage another motorist is in trouble. At times like this he feels that the search for high specific outputs may have been pushed too far, and that designers might divert more attention to carburation and manifolding as an aid to easy starting.



SCIENCE AND ROAD TRAFFIC (4)

BY MICHAEL BROWN

# Metropolitan Indigestion

LONDON APPROACHES STANDSTILL : MEASURING THE CONGESTION IN THE CAPITAL

This is the fourth of a series of articles describing the work of the road safety section of the Road Research Laboratory. Previous articles appeared in the following issues: "Collecting the Data" (December 9, 1949); "Pint Pots and Quarts" (December 30, 1949); "Proof of the Pudding" (January 13, 1950). A glossary of technical terms appeared on page 1373, December 9.

**I**N the second article of this series the Road Research Laboratory was quoted as suggesting that there was every indication that London's main streets could not accommodate much of an increase in traffic flow. Speed-flow relationship has been found to be linear (Fig. 8, Article II), and if it continues to be linear a 50 per cent increase in London traffic would reduce average speeds to the prohibitively low value of 5 m.p.h.

Good gracious, thinks the ordinary motorist, what a comment on 60 m.p.h. cars! Then he will probably forget all about it in the pleasure of catching the Embankment at 2 a.m. and maintaining 30 m.p.h. all the way from Boadicea's statue to the Blackfriars fire float. Now that is a pity, for London traffic is in a bad way already. Average speeds are depressingly low, vehicles per hour remarkably high. Reasonably exact figures for both were obtained by the Laboratory in a survey of 36 miles of London streets, and the results may be studied in the two diagrams on these pages.

Four main routes (W, X, Y and Z) were selected; these were subdivided as convenient and were followed by four cars. At 10.30 a.m. each day of the survey two cars set off from each starting point of a route in different direc-

tions and completed the circuit. Then the drivers changed over and repeated the procedure, thus eliminating driver characteristics as far as possible. Similar procedures occupied the afternoons. In all, twelve journeys were made in each direction along each route, two observers travelling in each car along with the drivers, who were instructed to drive at the general speed of the traffic as far as possible. One observer had a three-button counting recorder, counting cars, commercial vehicles and "others". The other recorded the accumulated totals of each class at timing points, together with the time by stop-watch; he also timed delays at controlled intersections.

From these data it was possible to work out traffic flow and vehicle speeds, and the maps giving these are extremely interesting subjects for study by those—and they must be many—who are familiar with the streets named.

The Laboratory has contented itself with presenting the maximum amount of data collected from this survey, remarking as its only conclusion of importance that to achieve major increases of speed the time spent stopped at intersections and the steady running speeds must both be improved.

Here, then, are important data on the state of London's traffic today:

SURVEY MILEAGE 36.4.			
Average flow along each road .. .. .	1,300 vehicles per hour		
Average speed .. .. .	11.1 m.p.h.		
Composition of traffic .. .. .	Private cars .. .. .	34 per cent.	
	Commercial .. .. .	35 per cent.	
	Miscellaneous .. .. .	31 per cent.	

Observations on controlled intersections on the survey routes during the busy part of the day revealed that, on the average, 41 per cent of the vehicles passing through were stopped. Time losses were as follows:

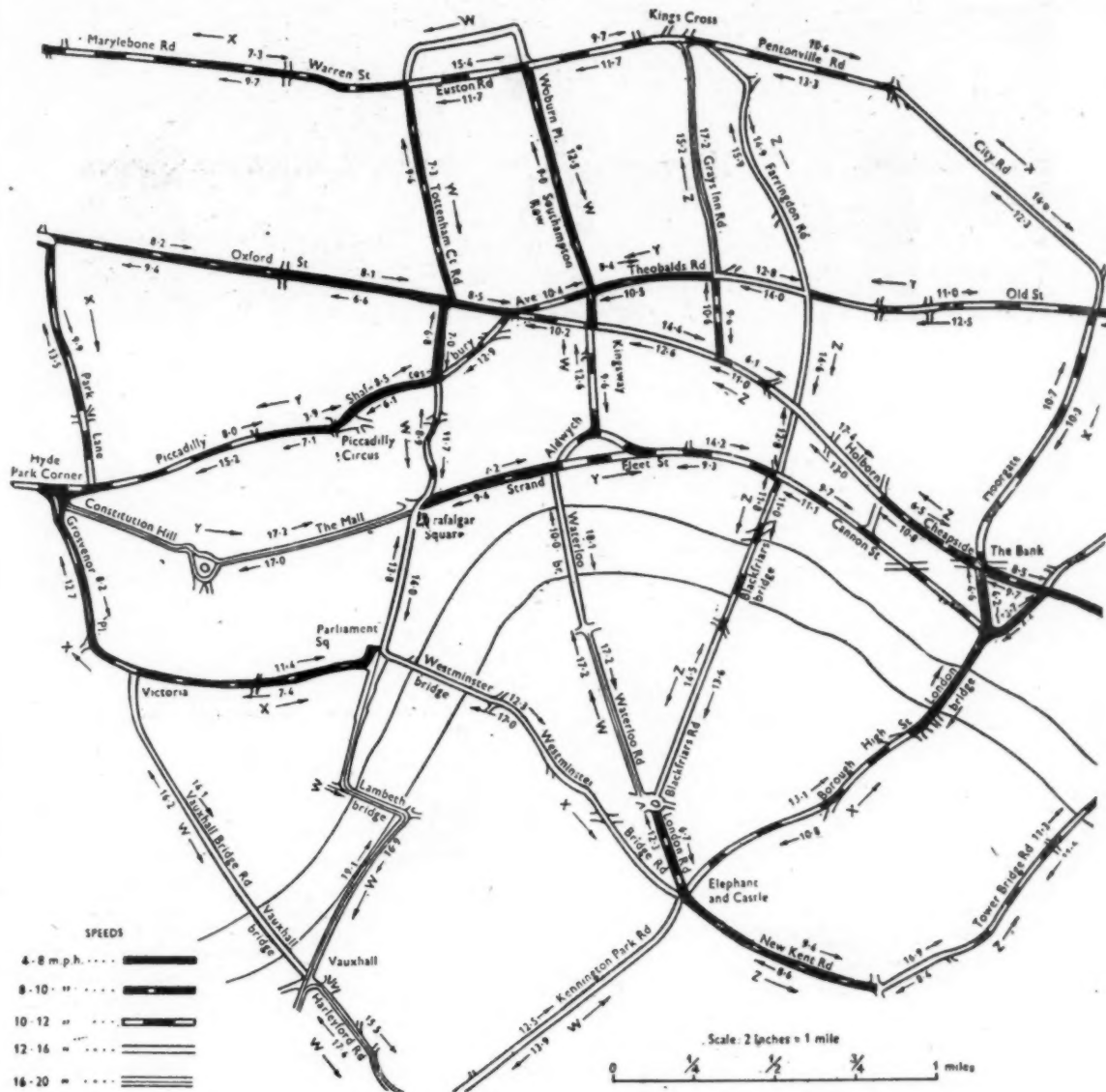
Stopped time	29 sec
Deceleration, manoeuvring and acceleration	15 sec
Total (per intersection stop)	44 sec
Loss per intersection passed	18 sec
Intersections per mile	5.3
Therefore each vehicle experienced 2.3 stops per mile and lost 1.6 minutes per mile.	

From these data the Laboratory sketches the magnitude of the London traffic problem. If the average journey speed (11.1 m.p.h.) were doubled the saving would be 2,100 vehicle-hours per hour. The census on one of the routes showed that, on an average, 6.3 persons were carried per vehicle. If this figure is applied over the whole of the routes, the doubling of the speed would result in a saving of 13,000 man-hours per hour, even on the routes covered, which were by no means all the chief streets of the capital. The Laboratory does not translate the result into hard

cash, owing to the impossibility of assessing how many of those man-hours were being paid for in wages and salaries, but it is obvious that the amounts involved must be great.

Such calculations are the sphere of the economist, but it is opportune to remind readers that these are the kind of figures which this journal frequently has in mind when talking of the cost of inadequate road systems in transport delays, for the cost is borne by British industry and is reflected in the high price of goods.

At the time of the census, therefore, the average journey speed in London was one mile per 5.4 minutes (11.1 m.p.h.). Since stops account for 1.6 minutes per mile, average steady running speed, excluding acceleration and deceleration times, was 3.8 minutes per mile, or 15.8 miles per hour. If this speed were increased to 30 m.p.h. while the stopped time remained the same, the journey speed would still reach only 16.7 m.p.h. (50 per cent above present level) and this shows more convincingly than anything how the frequent stops of London traffic are the worst aspect of metropolitan congestion.



Mean traffic speeds on well-known streets in London. Compare with illustration on next page.

# METROPOLITAN INDIGESTION . . . . . continued

FREQUENCY OF INSTANTANEOUS SPEEDS

M.p.h. Group	Frequency (per cent)
0-5	0
5-10	5.5
10-15	15.0
15-20	41.5
20-25	25.5
25-30	9.0
30-35	3.0
35-40	0.5

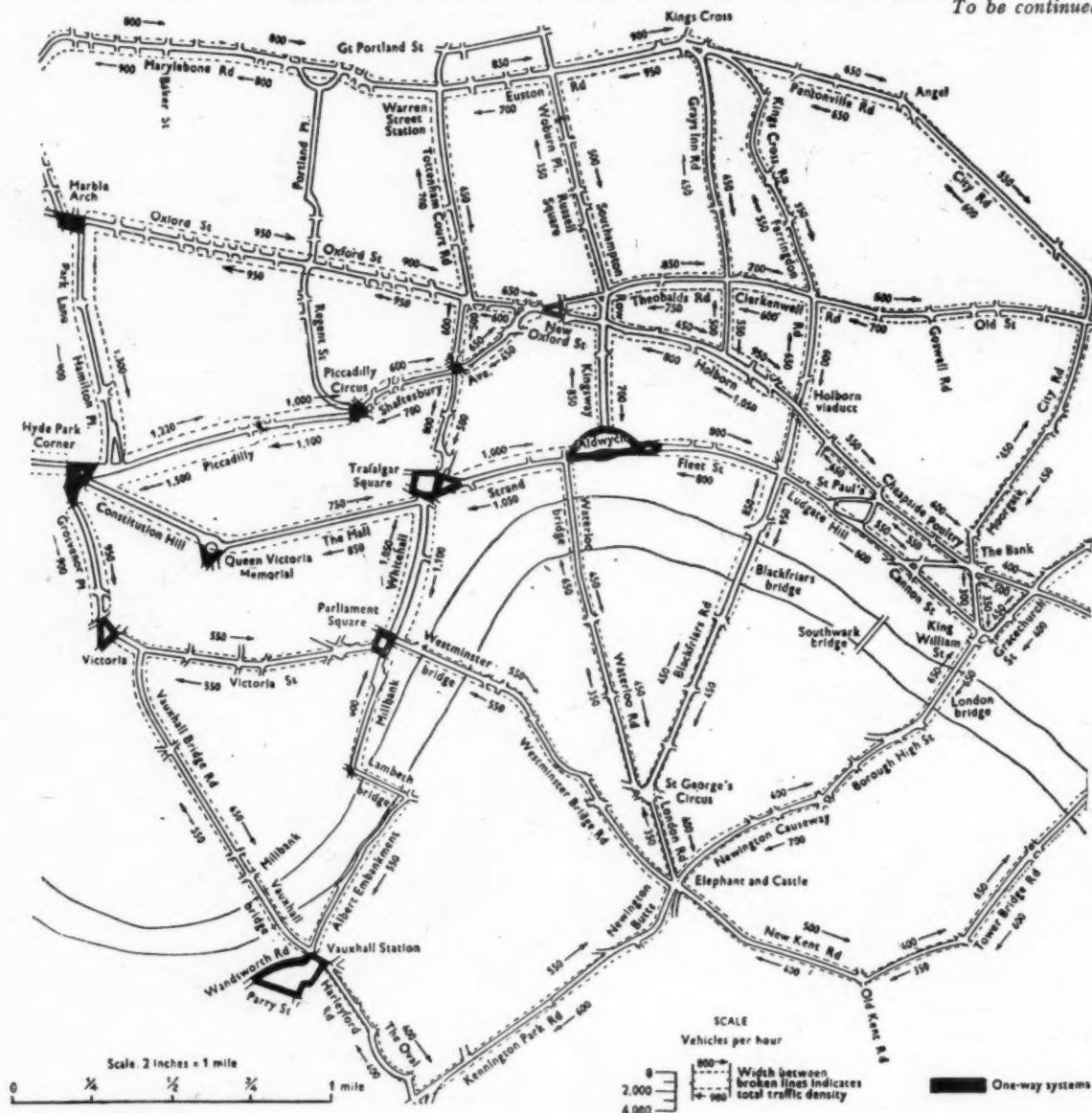
Average 18.9 m.p.h.

Diversity in running speeds was found to be so wide as to be surprising. Speed distribution of vehicles more than roof away from intersections in Oxford Street, New Oxford Street and High Holborn was taken and the results are given in the table alongside.

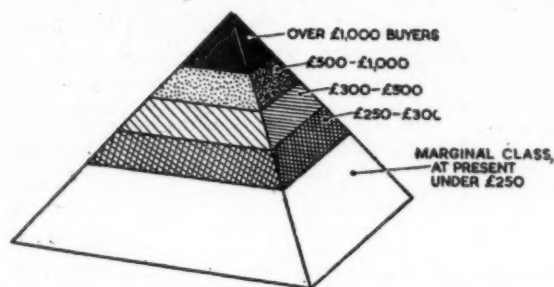
There is no need to labour the point of the usefulness of such surveys as this, and the subject of London traffic is so vast and complicated that motorists would be hesitant

to try to suggest remedies. What seems obvious, however, is that the intersection, as always, is the source of the most trouble (it is prolific of accidents as well as delays); likewise it is the most difficult problem with which to deal. Periodically, "through" routes into London are urged and various measures are suggested that would increase traffic flow on them. But very few protagonists lay sufficient stress on the many intersections that such routes would meet if they followed the line of existing roads. But how to get a comparatively junction- and intersection-free "through" route? The only pointer to method is the U.S.A., which has cut its losses and built parkways, subways, and suchlike. Britain may well have to face something similar for her biggest cities, but it is an intimidating prospect for local authorities, however much the thought may light the eyes of the road engineers.

*To be continued.*



Average weekday traffic (10 a.m. to 4 p.m.) on the survey routes in London. The dates of survey were September 23-30, 1947.



No matter how cheap the cheapest car or how large its market, a still bigger market always exists for the model that is cheaper still. Such a model brings in the marginal class, which forms the base of the pyramid of car buyers. This is true until subsistence level incomes are reached.

**A**FTER four years of post-war export experience, the present is a good time in which to take stock of car manufacturing policy. How fares the world in the matter of car exports?

The dominating factors are these: As a whole the world is still short of dollars, and American import policy shows no sign of relaxing to the extent necessary to balance the deficit. The world wants cars, and is still buying them wherever they can be bought. The suppliers are America, Britain, France, Italy, Germany, Sweden, Czechoslovakia, and possibly (eventually) Australia. Britain holds a dominant position at the moment. Is she going the right way about retaining it?

The answer to that question is the object of this article, and to determine that answer the position of each of Britain's competitors should be considered. Overseas correspondence, plus available statistics and experience, give this journal a reasonably shrewd estimate of export requirements, and in the light of this the following might be quoted as facts.

The average overseas buyer will buy American if he can get it. The value for money is exceedingly good; American appearance is impressive; service is excellent, and the cars perform admirably with great ease of driving. Only dollar shortage prevents American cars from selling in much greater numbers than they do at the moment.

France is producing her customary rugged and robust machines, well-designed, proved over the years and mechanically respected. Since the war she has concentrated on the production of vehicles for what this journal calls the "marginal motorist." Granted that the design of her small cars is as well done as that of her bigger ones (which may be safely assumed), these small cars represent formidable opponents. Her production is rapidly expanding and there are few artificial barriers to prevent exports; the world is not short of francs. Her cars are stylish in a typically French way.

### Style Leadership

Italy, as befits the country that sired the æsthetic glory that was Rome, has taken the lead in post-war appearance where cost does not count. This leadership in style stimulates favourable reaction towards her straightforward productions, usually somewhat "hotter" than those of the French, but equally well, if not better, designed. Italy established a pre-war lead in the marginal class with the Fiat 500 and there is a great demand for this car today. The world is not short of lire, either. Production, however, is only stumbling forward.

Germany is taking on the appearance of those question marks on the films which loom bigger and bigger, suddenly to burst into a thousand fragments when the awful truth is revealed. Production is rocketing, and out of a number of solid Teutonic designs the Volkswagen stands prominently as another car for the marginal motorist. German exports are controlled by the Allied Authorities, but Western political policy at the moment is not likely

# Time to Take Stock

WHITHER DESIGN?—WHITHER EXPORTS?—  
AND WHAT OF THE HOME CUSTOMER?

to restrain the Germans from trying to pay their way by exports; indeed, if such a policy is urged, the urgers must be prepared to pay Germany's way for her by means of taxation while the Allies retain responsibility for Western Germany.

Sweden has produced the Saab 92, an outstanding small car by all reports, and Czechoslovakia has paralleled her success with the Aero Minor, another for the marginal class. Sweden also has the Volvo, and Czechoslovakia the Tatra. Finally Australia makes the Holden car, a fairly lively medium-sized saloon which may have export possibilities, especially as it is produced under the aegis of the General Motors Corporation. Production of all these is still relatively small.

This state of affairs poses four questions for Britain. Does she produce normal family cars that represent a better bargain than the American car? Does she produce a "marginal" car that outperforms those of France, Italy and so on in m.p.h., m.p.g. and such like? Does she produce such stylish machines that the world will buy them for looks alone? If not, are her cars unique in some other outstanding particular?

### "No, but . . ."

To be entirely cold-blooded, the common answer to all these questions except the last is "No, but . . ." Unfortunately, it is very doubtful if a no-but policy will hold the market for ever, however telling the buts may be.

For the present the exception will be left undefined, and this article will deal with the shortcomings of British cars as seen through the eyes of overseas customers. It is true that many correspondents' criticisms can be met with the reply, "If he knew a little more about cars he would realize . . ." but to that the answer must be made that the average buyer of a car cannot be expected to know or to learn a lot about them. He does not expect to have to learn his television circuit.

Question one, then. Assuming that America holds the lead in providing value for money in the family car class, what can be said of the British examples? Quite a lot, in fact, as regards quality, economy and so forth, all of which have been stressed many times in this journal. But none of them makes a trumpeting sales point for British cars, because they become evident only after living with a car for some time. The Louis Armstrong touch is provided by appearance, which hits a buyer before he even checks his overdraft to see if it will stand a new car; it hits him from the pages of his newspaper, or fireside periodical, and the fact adds force to the commonest overseas criticism of British cars; they have no style of their own, but "falter along in the wake of the Americans."

Not altogether true, of course. There is no American progenitor of the Armstrong Siddeley, Triumph 2,000, Jaguar Mark V or 2½-litre Riley (make a note of those names for later reference). But true enough as a generalization.

A recent letter reiterating this criticism, and coming

## Time to Take Stock . . . . continued

from the type of correspondent whom one can respect, contains the information that the criticisms of American appearance are not confined to cars; they apply also to such things as machine tools and instruments. The writer quotes leading Italian industrialists to the effect that, having found that British machine tools had lost their individual appearance and had lined up with those of the rest of the world, there was no longer point in buying in a dear market. As a result, orders went to Germany.

These criticisms he passed on to the Council of Industrial Design, and notes regretfully that he did not even receive an acknowledgment. The correspondent acted more wisely than he knew, for the Council of Industrial Design may ultimately have to bear a great deal of the blame for the Americanization of British products. Logically, industrial design ideals must be roughly the same in all countries, being influenced only slightly by local considerations. Right then. If you are going to design to ideals both here and in America your products will look alike. And that is exactly what is beginning to happen. The council might well argue that ethically that is what *should* happen, but unfortunately the ordinary buyer does not appreciate the ethics of design. He goes bull-headed for what appeals to him.

### Lesson Unlearned

To take a typical example, there are many men today who were radio enthusiasts in the early days but who switch their modern sets on with no more emotion than they do the electric light. Analyse their change of heart and you will find that they enthused because they just loved the old black ebonite panel, the finely made vernier dials, the hefty lettered terminals and the massive contacts of the wave-change switch. (The same love inspires sports car owners.) Watch out, designers. It is too easy to kill.

No one ever defeated a competitor by imitating his product, even if other things were equal. When the balance is in favour of the originator, as it is with American cars—owing to size, for instance—imitation is less flattery than suicide.

Question two—the marginal car. Does Britain produce it? The flat negative here is qualified only by the existence of the 650 c.c. Lloyd, away up amongst the Grimsby fishermen. Amongst the large-scale manufacturers there is not a single marginal example in present production. Manufacturers may feel that the market for their near-luxury Eights and Tens will remain solid after the war-time backlog has been worked off. If so they are living in a false paradise, easily appreciated by comparing the ratios of prices to incomes now and before the war. If manufacturers failed to hear the broadcast talks of Geoffrey Crowther, Editor of *The Economist*, on this subject it is a pity.

Overseas, the marginal car must attract the marginal market, and to talk as if this market is not worth cultivating by comparison with the luxury market is poor business. Of course it is—and in conjunction with the luxury market. If Britain is not going to cultivate this vegetable plot, but is, instead, going to spend all her time and energy in the exotically scented flower beds, it is obvious that France, Germany, Italy and Czechoslovakia suffer from no such inhibitions, for they have first-class marginal designs.

Question three—unique stylishness. In a narrow way an affirmative can be answered to the question as to whether Britain possesses cars with this attribute. But by and large, no. In the last fifteen years, nothing as stylishly original as the Czech Tatra, the Fiat 500, the German Volkswagen or the new Studebaker has come out of this country. The impact of cars such as those mentioned on national styles has been immense. Even to see the back of them in the street is to be reminded at once of their country of origin, implying a distinction that is reserved, as far as Britain is concerned, for her traditional designs. Tradition must never be belittled, but ahead of the older

generation the child must always scamper, otherwise the race will eventually die. Where are the *original* British scampers today?

These remarks lead naturally into the consideration of question four, the only one that can be answered affirmatively. Are British cars unique in some other outstanding particular? Yes; they are unique in the maintenance of a fine tradition, coupled with quality of design, engineering and style. Here you may recall the names mentioned previously, adding to them other examples of the British quality car which come readily to mind. And from here on it is possible to be constructive instead of the reverse.

The British quality car has everything to ensure it a steady market at home and overseas. It is a market where price is not the main consideration, and consequently its cost need not be a main source of worry. Its reputation was made for it long before cars were invented, when British craftsmanship was making other goods with precision and character. It is in the happy position of being able to perpetuate the British quality hallmark while cashing in on it at the same time. And it has few—very few—challengers. Every encouragement should be given to the specialist manufacturers, and it is to be hoped that if the Government changes on February 23 one of the first things that the Tory party will do will be to eliminate the stupid, savage, class-ridden double purchase tax on these cars.

But the provision of such cars must not stop there. Service facilities are an accepted necessity, and, in addition, many foreign buyers criticize deficiencies of *knowledge* of the cars on the part of overseas agents. The answer to this is literature, if a high standard of overseas employee cannot be assured. Manuals printed in as many languages as possible, a continual dissemination of literature of instructive—and not propaganda—value; frequent overseas visits; all these help in overcoming this difficulty. And while the knowledge is being disseminated, parallel knowledge can also be gathered. Conditions overseas, and the specific needs of overseas buyers, for instance. How many letters bemoan the fact that manufacturers do not seem to *know* what sort of territory surrounds Timbuctoo or Caracas!

### Engine Size

Nothing has been said in this article of engine sizes, for the simple reason that it is the opinion of this journal that no changes are called for while petrol difficulties remain as pressing as they seem likely to do for a long time yet. Only in America is petrol plentiful and cheap; elsewhere the engine size of the typical British car is its great asset in achieving economical cost of running figures. The export outlook, as the car manufacturer has ruefully confessed, must be by no means confined to the Western Hemisphere, and therefore it would be silly to adopt huge engines in order to appeal to the typical American buyer. In any case, his own industry is in too favoured a position there, and to compete with that industry in its own line is not likely to prove profitable. Better results will probably be gained by persisting in the field that is operative now—that which supplements the American car by providing something smaller and cheaper. It may, of course, be necessary to modify this policy if petrol becomes plentiful and cheap.

This has been a hammering-out of future export policy and it may be summed up as follows. First objective should be to consolidate the hold that British quality has on the world's imagination. Second should be the provision of a marginal car for the "base of the pyramid" of car buyers, and third should be the development, in the in-between types, of an original style and designs, with the retention of as much quality as the price will bear. The final question posed by such a review is what effect the policy would have on the home market. The answer is a beneficial one. What home buyer is there who could not do, right now, with one of the three types of car implied by these objectives? Not one. And is there anyone amongst the car buying classes who has been left out in such specifications?

No.

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### ★ **SUNBEAM-TALBOT**

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**ALL CARS FINISHED**

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**(CLASS II)**

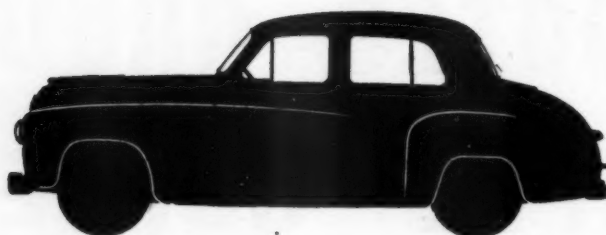
*Drivers: M. B. Anderson & R. M. Hastie*

**WINS CUP** presented to Manufacturer for highest percentage  
of entrants classified as finishers

**SIX OUT OF SEVEN CARS FINISHED**

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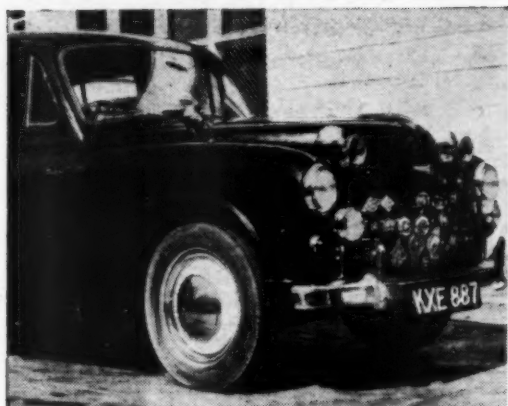
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LEADERSHIP IN LUBRICATION



### A BURST OF BADGES.

Mr. F. D. Gardner, of Hong Kong, took over a Hillman Minx in England and drove it for 6,000 miles round the Continent before returning with the car to China. In a tour which included France, Belgium, Holland, Germany (Eastern and Western Zones), Italy and Spain, Mr. Gardner collected a notable array of badges from various cities and car clubs on the way. The Minx, badges and all, went on display in the showrooms of the Hong Kong agents, Gilman and Co., Ltd.

### A Jowett Jupiter

IT has now been decided that the new high-performance car based upon mechanical components of the Javelin is to be called the Jowett Jupiter. It will be recalled that a prototype chassis designed by E.R.A., Ltd. was exhibited on the Jowett stand at the London Motor Show last September. Good progress is being made with manufacture of the production examples at the Jowett works, Idle, Bradford, Yorkshire.

The first model to be produced has a light coupé body manufactured at Idle, but chassis will also be supplied to specialist coachbuilders. The complete car will be seen at the Geneva Show in March and at the British Car Show in New York in April.

### Another Australian Car

THE Hartnett car, the second to be entirely made in Australia, will be on sale in November at £A430 according to a recent announcement from Sydney. The car is a four-seater claimed to have a maximum speed of between 60 and 70 m.p.h., and a fuel consumption of 50-60 m.p.g.

### Record-breaking A.70

UNTIL tomorrow (Saturday) the A.70 Austin Hampshire saloon which made record time from England to Cape Town (in 24 days 2 hr 50 min) is on view in the showrooms of The Car Mart, Ltd. at Gloucester House, 150, Park Lane, London, W.1 (corner of Piccadilly). Still carrying Sahara sand and Congo mud, it has an astonishingly "one-piece" appearance after its 10,000-mile dash, which attracted a great deal of attention in South Africa.

On Tuesday the drivers, Ralph Sleight and Peter Jopling, together with a small number of friends, were entertained to lunch by the A. J. Rayment, managing director of The Car Mart, Ltd.

### Invicta Winds Up

AN order has been made for the compulsory winding-up of the Invicta company, which has been in financial difficulties for more than a year. The original Invicta company was wound up before the war, and, after the war, an entirely new company started up in a different factory. This also ran into difficulty and, after it went out of production, a third Invicta company was incorporated. This is the company which has now been ordered to wind-up.

### TD for Philanthropy

ONE of the first TD type M.G. cars to reach the State of Kentucky, U.S.A., will be that which was presented to Mrs. Sally Baker during a reception at Nuffield House on February 2. She comes from Pikeville, Kentucky, and was elected as the most popular clubwoman of America during a competition held by the Mutual Broadcasting System. She is a nurse, and her work among the people of remote districts earned her the prize of a trip to Europe, and, at the suggestion of the British Consul in Los Angeles, the gift from the Nuffield Organization of the blue M.G.

### ... And on the Screen

THE film of the recent run to Val d'Isère by two TD M.G.s, which was described by Gordon Wilkins in *The Autocar* of January 27, is included in *Pathé Pictorial* 284, which is being released on February 20.

### Austin Achievement

BEST hard currency country for Austin cars is still Canada and, during 1949, figures for the registration of new cars in British Columbia show that one-third more Austins were registered than any other make.

### Ford Replacements

SALE of factory reconditioned Ford engines during 1949 exceeded 80,000, the company has announced. This is the highest figure in its history

# NEWS and VIEWS

## FAST JOWETT MODEL PLANS—AUSTRALIAN NEWS—M.G. SCREENED

and compares very favourably with the sale of 69,736 units in 1948 and 62,190 in 1947.

The Ford factory reconditioning scheme was introduced in 1934 and was the first of its kind to be operated by a British motor manufacturer.

### European Honours

THE vice-chairman of the Ford company at Dagenham, Sir Stanford Cooper, has been honoured twice by European governments recently. In December he was made a Knight of the Order of the North Star by the Swedish Ambassador in London, and in January he became a Premier Commander of the Order of the Finnish Lion.

### Steel for Studs

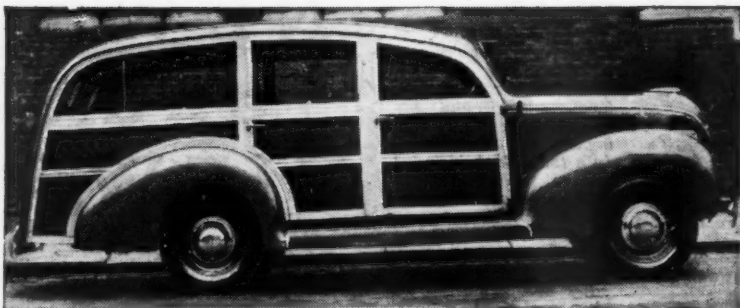
DESIGN of metal road studs and plates is now standardized by a specification recently issued by the British Standards Institute. It is interesting that the material specified is stainless steel, as no other material has been found which will give equivalent service.

### Bristol Chassis Described

THE February issue of *Automobile Engineer* contains a full description of the Bristol car chassis, Types 400 and 401. There is also an article on tyre quality, produced with the co-operation of the Avon company, and a detailed description of the Lucas vertical mag-



**BUGATTI REBUILD.** The car shown is a Type 43 chassis with a Type 44 engine, and the original special body has been redesigned into the form shown. A Daimler fluid flywheel and preselector gear box replace the conventional clutch and gear box. The work was done by V. W. Derrington, Ltd., 159, London Road, Kingston-on-Thames, Surrey.



### Station Wagon Conversion

Built by Grout and Co. (Coach-builders), Ltd., 473, High Road, Chiswick, London, W.4, this utility saloon is designed round a Ford V8 chassis. Of particularly pleasing lines, with ash ribbing and panels of aluminium, the body gives 7ft loading space. The seats are removable, to allow bed stowage when touring, and the floor is lined with rubber. The body and conversion of a chassis cost £275 and export orders are expected.

## NEWS and VIEWS

continued

neto. *Automobile Engineer* is published by Iliffe and Sons, Ltd., Dorset House, Stamford Street, London, S.E.1.

### I.Mech.E. Dinner

THIS evening the Institution of Mechanical Engineers (Automobile Division) is holding its annual dinner and dance at the Dorchester Hotel, London.

### Approved Caravans

AT the first annual general meeting of the trade division of the national caravan council, held in London on January 25, a scheme was put forward for labelling the products of approved caravan manufacturers, so that this guarantee would provide a safeguard for

both buyers and makers. This is to be part of a publicity campaign which takes an important place in the activities of the council in 1950.

### Danger in the Dark

AN appeal has been made by the director general of the Royal Society for the Prevention of Accidents, in an attempt to avoid an increase in the accident rate during election time, when extra evening traffic is expected.

### Motoring Policy

A STATEMENT of policy is to be sent to every candidate in the general election by the standing joint committee of the A.A., R.A.C. and the

R.S.A.C. It will reaffirm the view that a substantial increase in the petrol ration is now possible without detriment to the sterling-dollar balance, and that there is no reason for continuing the unfair discrimination which compels the majority of private motorists to pay tax at the 25s per horse power rate, instead of the £10 flat rate for cars first registered on or after January 1, 1947.

The statement will also refer to the failure to maintain an essential programme of highway improvement.

### Goods Guide

A NEW edition of the *Transport Goods Guide*, which has just been published, gives up-to-date and complete information for consignors of goods from a parcel to a 100-ton indivisible load. Classified sections include operators of "smalls" services, local carriers, long-distance services, clearing houses, and nationalized transport offices, all in A.B.C. form. Shipping, ferry and canal services and warehouse facilities are also included in tabulated form.

*Transport Goods Guide* is available, price 2s 6d post free, from Iliffe and Sons, Ltd., Dorset House, Stamford Street, London, S.E.1

## TROUBLE OVER TRADE PLATES

LAWYER - ON - WHEELS writes: Garage proprietors, mind how you use those trade plates! A motor vehicle repairer recently (*Scutt v. Luxton*, October 21, 1949) got into trouble by doing what Lord Goddard, C.J., described as a very understandable thing. The repairer had a contract for the repair and maintenance of a circus company's motor vehicles. One of them broke down while the circus was on the move to Crowborough, Sussex. They got hold of the repairer, who sent a lorry and towed the disabled vehicle back to his place in London. He was unable to repair it on the spot, or to find another lorry to take the load to Crowborough, where it was badly needed (especially as it included the hippopotamus' dinner!), so he loaded the stuff into his towing lorry and drove it down to Crowborough under its trade plates. Trade plates are used under a "general trade licence" issued under the Road Vehicles (Regulation and Licensing) Regulations, 1941. As every user of them knows, or should know, a motor vehicle may only be run under trade plates for strictly defined purposes. The defendant being a repairer, the particular use under trade plates permitted to him was use of the lorry "in the course of his business as a repairer of" motor vehicles [Reg. 29 (D) (1)].

He argued that he was obliging a valued customer whose own lorry had broken down, and that to do that was to use his lorry in the course of his business. The Divisional Court held that the repairer, in taking the customer's goods direct to Crowborough under his general trade licence, was, in fact, using his lorry as an ordinary carrier's lorry, and that

to do so was not within the purposes that were permitted by the licence.

The Lord Chief Justice added that there were certainly mitigating circumstances—but that would hardly be considered the case if a repairer, with this case on the record, now went and did the same thing again.



The problem of carrying skis is solved by a special rack at the rear of this Swiss Morris Minor supplied by J. H. Keller A.G., Zurich, who are agents for Nuffield cars.

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## WHAT TYRE VALVE STANDARDISATION MEANS



## ***Tyre pressures balanced to load***

Not always fully appreciated,  
is the fact that loading is as  
important with a passenger

car as with a commercial vehicle. Overloading is  
bad for the tyres and also affects the steering.  
Heavy loading can be balanced to a large extent  
by increasing the tyre pressures and this is a point

to bear in mind at holiday  
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business is simplified by the

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# Service Viewpoint

SEEING OURSELVES FROM THE OTHER SIDE OF THE PETROL PUMP

These notes are a further selection giving the point of view of the retailer and service station manager. They appear from time to time, and form an admirable balance for the frequent complaints regarding service that motorists make. Previous articles have appeared on October 21, November 18, December 9, 1949 and January 6, 1950.

## Charges

THE work of repairing motor vehicles must exercise some strange fascination. At least, I can think of no logical reason why many men and boys are willing to make their living in service station workshops. A competent motor mechanic must possess at least as much skill in the use of hand tools as any other engineering tradesman; he is expected to know his way about hundreds of different makes, models and types of vehicles of greatly varying design and construction; he should be able to use simple machine tools and accurate measuring instruments and to weld, braze and solder. Apart from these purely physical accomplishments he is expected to have enough theoretical knowledge to help him to diagnose faults. He must accept working conditions which, even in the best laid-out and equipped workshops, are frequently neither clean nor comfortable owing to the type of job done. Yet for all this he has to be content with a basic minimum wage, in the provinces, of 2s 7d per hour. Compare this with the wages paid to skilled operatives in factories and I think you will agree that the choice of motor vehicle repair work as a career cannot be governed by logical considerations.

## Guarantees

HOW many motorists ever trouble to read the guarantee which accompanies a new car? Those who do will be shocked to discover, in most cases, that an undertaking is given only to replace without charge any part which proves defective within the guarantee period; but nothing is said about the cost of labour expended in fitting the replacement part. If interpreted to the letter such a guarantee may prove to be of little value. It may well cost several pounds to fit a part costing a few pence. A new car may require an adjustment which is quite expensive but which involves no replacements at all.

In practice, of course, most manufacturers do contribute towards labour costs as a matter of policy, but each case has to be referred to the manu-

facturer before a decision is given; this may cause considerable delay during which the motorist must either lose the use of his car or have the necessary work done without knowing whether he will have to pay for the labour or not. This is most unsatisfactory, but I am happy to record that there is, to my knowledge, one manufacturer who has for many years operated a simple procedure for repayment of labour costs. All this manufacturer's dealers are authorized to charge the manufacturer with the whole labour cost during the first three months of the guarantee period and half the labour cost during the second three months. (Above a certain price limit authority must be obtained from the factory, but in urgent cases this can usually be arranged by telephone.)

Consequently the owner of one of this manufacturer's products who experiences trouble during the guarantee period can take his car to any of the manufacturer's dealers, present a small card certifying the date of delivery of the car, and have the trouble put right on the spot without any argument as to payment. It will save the trade a great deal of trouble when all manufacturers decide to adopt a similar procedure.

## Air

FREE air was the subject of controversy within the trade shortly after the war. Some garages started making a small charge for tyre inflation during the war and were reluctant to abandon the practice; others contended that most motorists expected free air and, with the return of keen competition, would avoid garages which did not offer it. In our firm we were for some time without a definite policy until an amusing incident precipitated a decision. One day two small boys, aged about eight, drove a small two-seater pedal car into the yard, drew up smartly by the air tower and asked an apprentice who happened to be near if they could have their tyres blown up. Being a father myself and knowing how deeply a child's feelings can be wounded by a thoughtless rebuff, I was moved to deal with the situation personally. With all the gravity I could command



I inflated the tiny tyres myself, but my grave demeanour was put to a severe test when a hot and sticky penny was offered in return for the service rendered. Needless to say I refused the offer and Free Air has been our rule ever since.

## Variations

I DID something recently which many motorists must have longed to do. I drove a police car, with "Police" signs aloft, and with a constable beside me actually encouraging me to push the car to its limit. This particular car was one of four of a well-known sporting type which we have supplied to the local constabulary: at sixty-two in third and about eighty in top all the usual signs of valve bounce appeared, but the valve springs showed exactly the same figures on test as those of the other cars, all of which will run up to seventy-five in third. I was asked to try the car and give an opinion, but I could only agree that if the trouble wasn't valve bounce, it felt exactly like it. Eventually the makers were called in. They confirmed the diagnosis and explained that the disparity in performance between similar cars was just "one of those things", and that, anyway, the speeds reached by the car I drove were exactly the maxima quoted in the instruction book.

## Awkward Customers

THE petrol scrounger is a particularly irritating pest. He (or all too often she) has a nasty habit of leaving his or her car for repairs—or even garaging—with barely a cupful of petrol in the tank, so that it runs dry while we are manoeuvring the car round the premises or taking it out for test; we put in a gallon and hope we shall one day recover the coupon.

Another gambit is to arrive at the pumps with a plausible story about having left the ration book at home and a fervent promise to let us have a coupon tomorrow. Strictly speaking we should refuse to supply, but how can we be expected to harden our hearts to regular customers who have been with us for years?

SERVICEMAN.

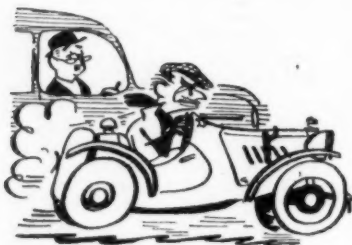
# Disconnected Jottings

BY THE SCRIBE  
Drawings by Barry Appleby

## Rhythm

**P**ERFORMANCE, says one of my more dogmatic friends, is secondary to rhythm, when the task is to get from A to B quickly, pleasantly and economically; the old story of the tortoise and the hare. He suggests that the sporty types are too tempted to rush past the more sedate family saloon, only to brake fiercely at the traffic lights immediately ahead. This process of hurrying to obstruction and having to make a standing start is claimed to be a waste of petrol, to increase rather than decrease travelling time, and to be heavier on the car. Timing one's openings provides the rhythm.

There is a good deal of truth in this, of course, but surely one cannot compare the performance of different cars under this heading? It is a matter of driving skill, and the good driver in the high-performance car will still beat the good driver in the family saloon.



The tortoise and the hare.

## Everlasting?

**A** WOKINGHAM garage proprietor sends me an E coupon that, apparently, never expires—at least not until the end of the year. It is stamped "Not valid after February 30, 1950." As February 30 will never turn up, the coupon is presumably all right until December 31.

## Puzzling

**T**HE following is a true experience. Mrs. B, in a 1947 saloon, pulls up on a flat road outside a garage and pulls on the hand brake. When she returns, the car has run forward 15 to 20 feet against the hand brake and come to rest without hitting anything, either kerb or bump. She enters the car and finds the steering loose in her hands. The steering box is fractured cleanly into three pieces, one piece of casting being found in the road. Examination revealed only one factor which might have a bearing on the case—pinion teeth showed slight wear, especially of one tooth, which looked as if it might

have mounted its opposite number.

The car's normal usage is in a hilly district, with roughish roads, but it has not been bumped into kerbs or ill-treated in other ways. Explanations, please. Are any of the details quoted relevant, or is it just a case of coincidental metal fatigue?

♦ ♦ ♦

## Dipping

**A**FTER a spell with a hand-dipping switch I have come to the conclusion that, on the whole, I prefer the foot-operated dipper. Being right-handed, I find it difficult to remember to use the left hand in order



Absence of a third hand.

to operate the switch and am, as a result, sometimes caught with not much space to spare and with my right hand off the wheel rim. At such times I want it on the wheel rim, in company with the left. One-handed driving, with either hand, is one of the things I have always avoided on principle.

There are, of course, times when one wants two left feet in order to operate the foot switch at exactly the right moment. But on the whole I feel the absence of a third foot less than I do the absence of a third hand. In case the preferers of hand switches descend on me with wrath, let me add that I do not think there is much in it either way.

♦ ♦ ♦

## Production Costs

**H**ARDLY a week passes without some Minister of This or That exhorting industry in general to increase production and reduce production costs. One wonders if they have ever heard of the adage about teaching grandmothers to suck eggs, because in these strenuous days there can hardly be a single production engineer in the country who is not having sleepless nights trying to do those very things.

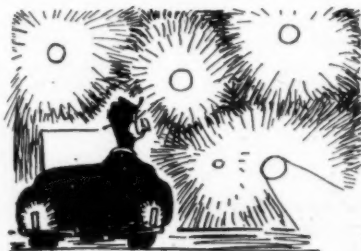
One wonders also if those same Ministers realize that one of the basic requirements to attain these objects is cheap and abundant electric power—and coal, too. Nationalization does not appear to have cheapened either, possibly because of the sort of thing

from which one of my colleagues is suffering. He is waiting for electricity to be laid on to his cottage in the country; all is ready on the part of the electricity authority, who long ago secured the necessary way-leaves to erect their poles and overhead lines from the private landowners concerned, but who still awaits a way-leave from—who do you think?—another nationalized concern, British Railways!

♦ ♦ ♦

## Unofficial Lights

**T**HE restoration of lighting facilities to premises is not an unmixed blessing, for drivers are now confronted once more at night with inexplicable lights here, there, and everywhere. When I have been sitting alongside drivers at night, perplexed by the road ahead, I have often wondered if their apparent surefootedness was indicative of a shortcoming on my part, for their confident hurtling into the bevy of lights ahead has impressed me. With the positions reversed, and with one of those very drivers as a passenger the other night, I came up A30 from Basingstoke towards London. Blocked by a lorry, I went to overtake on an open bend and then withdrew as, in the distance, a double-decked bus appeared, coming towards us. But it wasn't a bus—only two petrol pumps against the white wall of a house on the left-hand side of the bend. Mortified, I said



Inexplicable lights.

nothing. Later I sped through the firework display of Blackbushe airport (harmless, this lighting) and on along the Flats. Ahead appeared a confusing mass of lights. "What on earth is one to make of that lot?" I asked. "Are they head lights, street lights, traffic lights or what?"

My companion, I am almost sure, gave a sigh of relief. "Thank heaven," he said, "that others feel as I do. I was beginning to put my perplexity down to the effect of old age on my eyesight." I think both of us felt as one does when the doctor says it is just a cold, and not pneumonia!

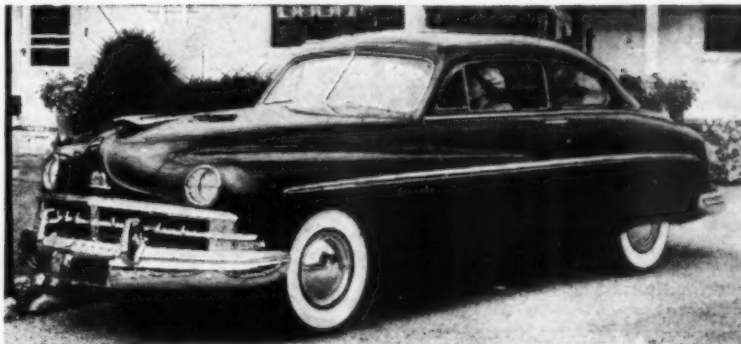
# American Innovations

CHEVROLET AUTOMATIC TRANS-  
MISSION. LINCOLNS FOR 1950

**H**AVING made a profit of \$600,000,000 (£213,000,000) last year, the General Motors Corporation has just spent about £350,000 on a nine-day show in New York to present its complete range of models for 1950. Besides new models in standard finishes there were some specially prepared glamour models, including a Cadillac coupé upholstered with fourteen perfectly matched leopard skins, the upholstery alone being valued at about £1,800.

All the 38 different models on show, including the cheapest, a Chevrolet at £478, are available with some form of automatic transmission as an optional extra. The new Chevrolet transmission, known as the Powerglide, follows the same general principle as other recent transmissions from American manufacturers, with an hydraulic torque converter and a planetary gear set to provide reverse gear and an emergency low forward ratio.

The torque converter is unusual, however, in that it consists of five elements instead of three: a primary pump, a secondary pump, a turbine and two reaction members or stators. The secondary pump and the two stators are mounted on cam and roller free wheels. A further feature of the converter is an overrun coupling consisting of two vaned wheels, rather like sirocco fans, mounted inside the annulus of the hydraulic circuit. One of these is connected to the pump and the other to the turbine, and they are said to provide additional engine braking and make it possible to push-start the car at speeds as low as 12-15 m.p.h. As in the Buick Dynaflo transmission, the converter functions as a fluid flywheel and is not locked mech-



The latest Lincoln has a simplified radiator grille extended in width to incorporate side lamps in the current American fashion.

anically for direct drive. Oil in the hydraulic circuit is cooled by passing through a heat exchanger in the engine cooling system between the radiator and the water pump.

Chevrolet cars offered with the Powerglide transmission will have a more powerful engine based on the existing design, but with bore and stroke increased to 90.5 x 100 mm, giving 3,859 c.c. This engine has hydraulic tappets, a new cylinder head, larger valves and greater manifold areas, which enable it to deliver 105 b.h.p.

Among the Buick cars at the General Motors show, the new Tourback models carry the current vogue for big rear windows to its logical conclusion by eliminating the rear quarters entirely and bringing the rear window round to meet the quarter lights on a pillar no thicker than a normal screen pillar.

Cadillacs show price reductions ranging from £15 to £75. Cheapest models are now under £1,000. Overall height is

reduced by four inches on some models, but they are longer than ever, with wheelbases increased by as much as 10 inches. Several models feature the new all-round glazing with elimination of rear quarter panels.

Lincoln cars for 1950 just announced in Detroit, show no fundamental changes from last year, but have new radiator grilles incorporating parking lamps in the current fashion. All models are available with Hydramatic transmission, and carburation modifications have been made to ensure easier starting and low idling speeds to minimize creep with the hydraulic transmission. Frames are heavier, there are new door locks, and cloth upholstery can be had in a wide choice of patterns and colours. Leather is available as an alternative, but owners of pre-war European small cars will be surprised to learn that two-tone leather trim is offered "for what is believed to be the first time in any automobile other than a strictly custom car."

In New York's Waldorf-Astoria hotel latest General Motors cars were displayed under a column decorated with cut-outs of earlier types. A new and bold treatment of the rubbing strip is featured on the Buick convertible on the left.

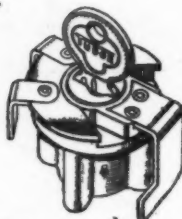


# ACCESSORIES

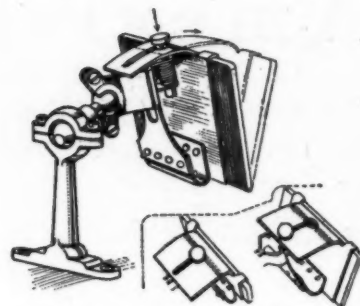
## LOCKING CAP FOR VAUXHALLS

THE range of locking petrol filler caps made by Tudor Accessories, Ltd., Silverdale Road, Hayes, Middlesex, to which previous references have been made, has been extended by a special model for Vauxhall Velox and Wyvern cars. These cars have a small filler neck concealed under a flush-fitting, button-operated flap in the wing, and the Tudor cap fits into the neck. A swivelling lug secures the cap and it is not free to turn until the key is inserted. When the key has been turned to the "open" position, it is not free to come out of the cap and is used to lift out the cap.

The price is 13s 6d.



Tudor's special internal locking cap for Vauxhall cars.

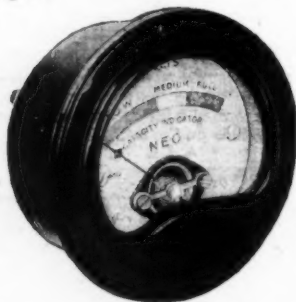


The Tiltaset mirror, showing the spring button which locks it in the "dipped" position.

## TILTING MIRROR

A **DIPPING** rear mirror for avoiding dazzle from the lamps of following cars, the Tiltaset, is now in production by Hughes Motor Fitments, Ltd., 59-60, Parade, Birmingham, 1. The mounting pedestal carries the mirror by an arm incorporating two universal joints, providing universal adjustment of height and angle. When the setting is correct, the joints can be tightly screwed up, permanently preserving the setting, or left easy enough to permit adjustment for different drivers. The mirror itself is hinged to a back plate by a sheet of spring steel. It can be dipped by a touch of the hand, whereupon a catch is engaged. A touch on the button of the catch releases the mirror, which springs back into the normal position.

Construction is strong, and the finish is in good chromium plate. The price is 15s.



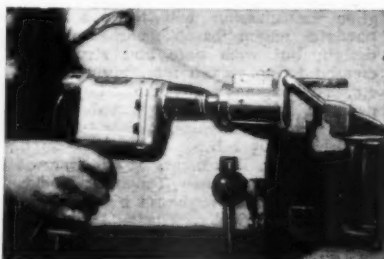
Neo battery state-of-charge indicator for fascia mounting.

## FLUX-CORED SOLDER

**M**ULTICORE Solders, Ltd., Mellier House, Albemarle Street, London, W.1, the makers of Ersin solders, have introduced a new product, Arax Multicore solder. It is of the tubular type, having two kinds of acid-free flux self-contained in the core, and is designed for soldering practically all metals except aluminium. The residue of flux left on the work is removable by water and needs no "killing" by chemicals. Arax solder is marketed in four specifications: 60/40 tin-lead low melting point, 40/60 general purpose, and 20/80 tin-lead high melting point, all in various gauges. For the ordinary user,

however, "mixed bags" of 18-60ft are made up in 5s cartons. It is also available in a kit consisting of two kinds of Ersin and two of Arax solder, costing 2s, and with a leaflet of directions. They are available at shops and garages.

Arax solder has been found to be easy to use. The flux is effective, giving good spread and adhesion, and a good job of soldering can be turned out without any great skill.



The Kingsbourne hacksaw drill attachment.

## CONDITION INDICATOR

**I**N these days, when a battery is subject to so many demands, there is a lot to be said for fitting some means of indicating its state of charge more accurately than the customary blipping of the horn and judgment by the pitch of the note.

A battery capacity indicator for this purpose has been introduced by Neo Electrical Industries, Ltd., 87-89, Cor-

poration Street, Manchester, 4. Designed for flush fitting in the fascia, the instrument has a black moulded plastic case and the dial carries a graded coloured scale showing "low," "medium" and "full" states of charge. Either 6- or 12-volt models are available and the price is £1 10s.

## POWERED HACKSAW

**M**OTORISTS who have an electric hand drill (or a flexible shaft drive) in their workshop can extend its usefulness with an attachment operating a hacksaw. The attachment, which fits into  $\frac{1}{2}$ in collets or chucks, converts the rotary drive of the drill into a reciprocating motion to operate a hacksaw blade. Special blades are not required, but the length should not exceed 6in, the actual stroke of the blade being  $\frac{1}{2}$ in. A quick cut is given; a blade of 18 teeth to the inch is claimed to cut through a  $\frac{1}{2}$ in steel bar in 90 seconds.

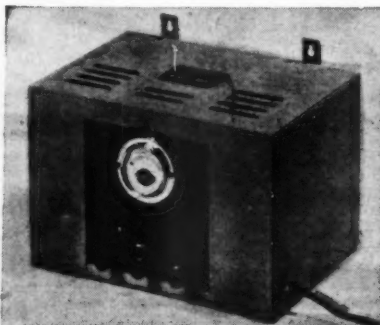
The makers are Kingsbourne Products Ltd., 3, Eagle Street, London, W.C.1, and the price is £2 5s.

## BATTERY CHARGER

A **H**OME battery charger for 6- and 12-volt batteries, the Atlas H5, is being made by H. Clarke and Co. (Manchester), Ltd., Atlas Works, Patricroft, Manchester. Models are available for 200-250-volt, 100-110-volt and 100-125-volt a.c. mains supplies. The charger has a maximum output (at 12 volts) of 5 amps. It has an ammeter to show the charging rate, incorporates a fuse, and is suitable for wall or bench mounting. The price is £7 15s.

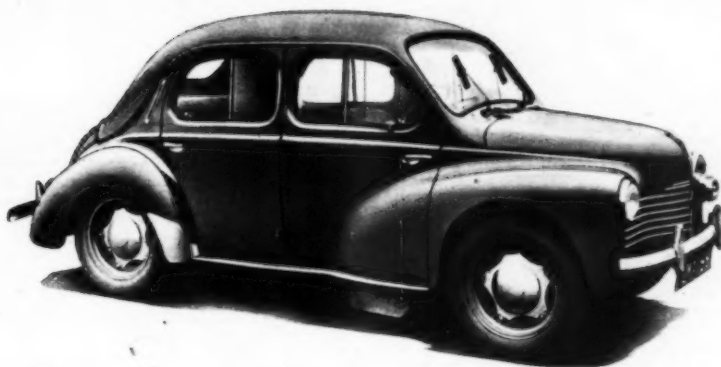
## LIQUID ROOF

**A**LTHOUGH the sunshine roof, of the British sliding pattern, is not used on American cars, a new and complicated invention has recently appeared for a similar purpose. It consists of two or more layers of transparent plastic, between which liquid can be passed. By this means it is possible to control heat absorption and reflection, and degrees varying from slight opacity to complete black-out can be obtained. The roof does not, of course, provide the fresh air ventilation which is one of the best features of the British sliding roof. So far, this novel device has not been put into production.



The Atlas battery charger.

# The Autocar ROAD TESTS



## No. 1398—RENAULT 760 SALOON

### DATA FOR THE DRIVER

#### RENAULT 760

PRICE, with four-door saloon body, £320, plus £89 12s 9d British purchase tax. Total (in Great Britain), £409 12s 9d.

ENGINE : 7.5 h.p., 4 cylinders, overhead valves, 55 x 80 mm, 760 c.c. Brake Horse-power : 19 at 4,000 r.p.m. Compression Ratio : 6.7 to 1.

Max Torque : 32.6lb ft at 1,500 r.p.m. 13.5 m.p.h. per 1,000 r.p.m. on top gear.

WEIGHT : 11 cwt 3 qr 21lb (1,337lb). LB. per C.C. : 1.76. B.H.P. per TON : 31.83.

TYRE SIZE : 4.75 x 15in on bolt-on steel wheels.

TANK CAPACITY : 6 English gallons : approximate fuel consumption range, 40-46 m.p.g. (7.1-6.1 litres per 100 km).

TURNING CIRCLE : 27ft (L and R). Steering wheel movement from lock to lock : 4½ turns. LIGHTING SET : 6-volt.

MAIN DIMENSIONS : Wheelbase, 6ft 10½in. Track, 3ft 11in (front and rear). Overall length, 11ft 10in ; width, 4ft 8½in ; height, 4ft 9in. Minimum Ground Clearance : 7in.

#### ACCELERATION

Overall gear ratios	From steady m.p.h. of	10-30	20-40	30-50
5.05 to 1	sec	16.7	20.2	38.9
8.55 to 1	sec	9.8	15.3	—
17.50 to 1	sec	—	—	—

From rest through gears to :—	sec
30 m.p.h. .. .. .	12.2
50 m.p.h. .. .. .	50.0

#### SPEEDS ON GEARS

(By Electric Speedometer)	M.p.h. (normal)	K.p.h. (normal and max)
1st .. .. .	14-20	22.5-32.2
2nd .. .. .	32-41.5	51.5-66.8
Top .. .. .	55	88.5

#### Speedometer correction by

##### Electric Speedometer :—

Car Speedometer	Electric Speedometer
10	11.5
20	20.0
30	29.0
40	39.0
50	49.0

WEATHER : Dry, cold ; wind negligible.

Acceleration figures are the means of several runs in opposite directions.

Described in "The Autocar" of October 11, 1946, and July 11, 1947.

From this angle the Renault gives no hint that it is rear engined. It is pleasing as a neat and well-balanced small saloon, with four doors. Between rear wing and door is seen one of the air scoops for engine cooling.

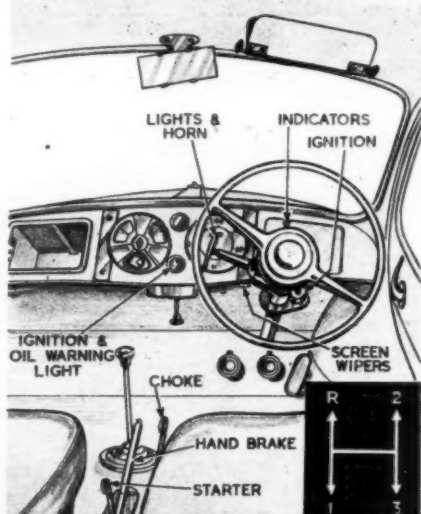
ALTHOUGH the rear-engined Renault has been in production in France for some two years and also was exhibited at the two post-war London Shows, it is as yet almost unknown at first hand to the British public. Now, as announced in *The Autocar* of December 23, 1949, it is also being assembled and finished in England by Renault, Ltd., and fitted with a proportion of British accessories, but, naturally, the main part of this British production is for export.

Knowledge of the great popularity this car has already gained in France by reason of its low price and economy of running costs causes one to expect something decidedly unusual and attractive among really small-engined cars. As the model name denotes, the engine is of no more than 760 c.c., which makes it, with one exception, the smallest engined car in present production in Great Britain. On a shorter wheelbase than that of any full-scale car made here is contrived an adequate four-door four-seater saloon body that places its occupants well within the wheelbase.

There is no suggestion of the ultra-diminutive about the Renault externally and on the road it quickly demonstrates that it is no toy or mere runabout. It is one of the handiest cars imaginable for driving in town traffic, for parking and for housing in a private garage, and ideal for narrow, sinuous lanes, but also it is equal to serious motoring requirements. It more than keeps pace with the flow of traffic, and, in fact, can achieve decidedly useful average speeds on a journey.

Economy is obviously one of its foremost points, and even the conditions of test driving, which are not helpful to obtaining optimum fuel consumption figures in the overall sense, have very clearly underlined this aspect. It has been shown that *whatever is likely to be done with the car*, short of the most improbable feat of driving it all day at unrelieved full throttle, better than 40 m.p.g. (7.06 litres per 100 km) should be seen, and that is an achievement for a four-seater saloon. With more moderate driving such as an average owner of a small car employs it is clear that 45 m.p.g. would be readily obtained, and even more according to conditions of use. At maintained speeds in the twenties and thirties—conditions which do not line up with everyday driving needs—fuel consumption figures of a phenomenal order in the fifties per gallon could no doubt be recorded.

It is, however, the overall consumption picture which is of practical interest to the owner, and the striking point in this connection during the test of the Renault 760 was that on a 100-mile journey over what may be called average English main roads, including on the outward run a considerable hill of 1 in 9 maximum gradient (which it climbed with two people on board at not less than 20 m.p.h. on second gear), and involving on the return run a 1 in 6½ gradient hill (where first gear was required and the speed did not drop below 15), the petrol consumption worked out at 42.7 m.p.g. Approximately 38 m.p.h. was averaged over a forty-mile section which gives little chance of the faster cars using their abilities for long : The Renault took





Only the louvres in the tail panel and, on closer inspection, the radiator filler just below the rear window, betoken any departure from convention when the car is seen from behind. The "spider" wheels, bolted at the rims, the pull-out pattern of door handles, stout bumper with overriders, and the considerable area of the rear window will be noticed.

## ROAD TEST . . . . . continued

only some five minutes longer to cover those forty miles than a large number of cars of greatly varying size and type for which average speed data have been recorded. Even under conditions which involved two starts from cold with use of the choke, driving in Central London, and other wasteful circumstances, just over 40 m.p.g. was shown.

The performance makes the car interesting to drive. It will hold 50 m.p.h. readily, with some noise and slight sympathetic vibrations in the steel body-chassis structure at one or two critical speeds but not enough tendency in this direction to matter, nor more than might reasonably be expected of a small car working hard. Advantage can be taken of any slightly favourable down slope to push the speed above a genuine 60 m.p.h. if the driver is so inclined. On the level, with no assistance from wind, 55 m.p.h. is about the maximum. The speedometer, which along with other instruments is one of the British components of the cars assembled in England, proved refreshingly close to accuracy, and when on one occasion, with assistance from gradient, the reading was taken as high as 68, the engine proved smoother and the general running quieter than at some 10 m.p.h. less. Top gear ratio is not specially low, but the engine is flexible on it down to under 10 m.p.h. Right-angle corners can be rounded on top gear and a smooth enough pick-up obtained away from the corner, provided that some care is taken with the operation of the throttle pedal. There was no sign of pinking or running-on however hard the car was driven.

The little engine is not at all easily forced by gradients on to second gear of the three-speed box. This is a useful ratio, with a genuine maximum of just over 40 m.p.h., and the gear change between second and top in particular can be quick without overriding the synchromesh. Acceleration from rest is quite brisk with moderate use of the gears. The gear lever is a vertical central control which has a good deal of movement between the positions, and the gear change is on the whole convenient and satisfactory.

Steering and brakes are more than adequate; indeed, they are rather specially good, and the control characteristics are exceptional. The car's centre of gravity is quite low, and the suspension by coil springs, independent front and

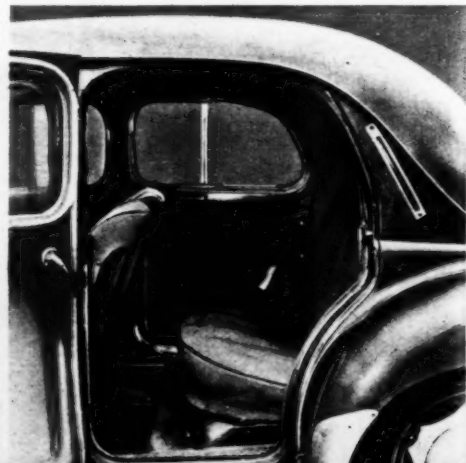
rear, is firm. The Renault rides level on a good road, can be taken round the bends fast with a feeling of security, without rolling, and behaves remarkably well in, for instance, a sharp roundabout typical of British roads. The rack and pinion steering is finger light, accurate, has pronounced castor action and does not receive road wheel shocks. The fact that it proves to have a much lower ratio than is suspected is a tribute to the definiteness of the steering. The Lockheed hydraulically operated brakes give really brisk deceleration when required, showed no sign of loss of efficiency during the test, and left the impression of being thoroughly competent, without needing heavy pedal pressure.

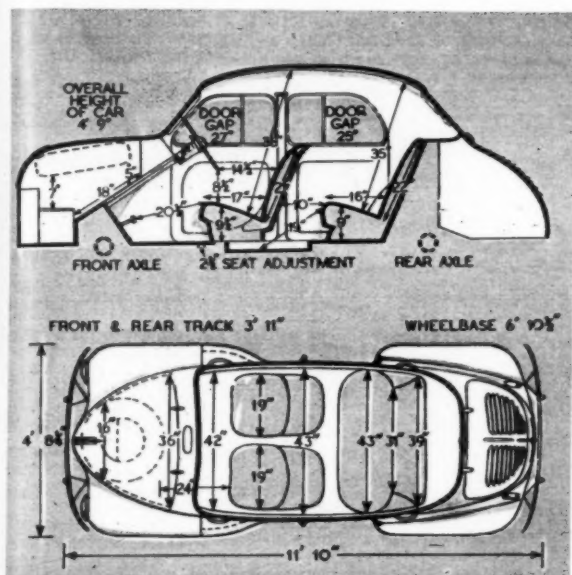
As it happened, the car was tested during a very cold, dry spell and in spite of nearly 500 miles being covered in all no opportunity was afforded, except for a few miles in restricted areas in London, of driving it on wet roads to discover whether the unusual distribution of weight that results from the engine being at the rear has any marked influence on control characteristics under adverse surface conditions. The rear wheels carry approximately  $7\frac{1}{2}$  cwt and the front  $4\frac{1}{2}$  cwt.

In ordinarily fast driving the Renault gives no unfavourable clue to having its engine placed unconventionally; there was no trace of "snaking" on the straight, a tendency which has been experienced in the past with even a small rear-engined design. One is conscious of the front wheels taking shock over, for instance, setts, or where surfaces deteriorate, but the movement is not transmitted disturbingly to the occupants, and there is no marked vertical motion.

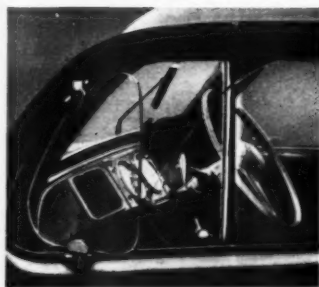
Exterior finish is good. The interior is plain, with a minimum of frills, but hardly amounting to austerity treatment. Vynide leather cloth upholstery is available optionally, as an alternative to cloth, or, at extra cost, real leather can be had. The separate front seats are adjustable to three positions, the farthest forward of which gave an average-height driver a good feeling of control, although it would be better still if the steering column could be lowered. The wheel itself is thin-rimmed and comfortable. A wide shoe may be apt to catch under the brake pedal, and the

All doors open fully back, as seen in the left-hand picture, but are prevented by stops from touching. Pockets of really useful size are formed in the lower part of the front doors. The combined ignition and steering lock is seen at the right of the steering column; also, in the floor at the right of the door opening, one of the grilles for admitting warm air from the engine compartment. Very adequate rear seat leg room is provided and the door opening gives maximum possible convenience. In the farther door sill can be seen the recess conveniently provided for hand grip when closing the door from inside. Triggers embodied in the locks enable the doors to be slam-locked from outside. The British pattern of built-in traffic signals will be noticed.



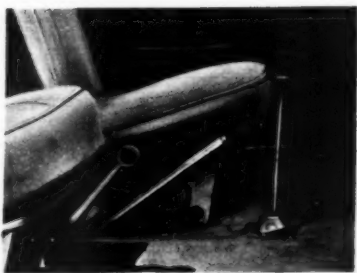


Measurements in these scale body diagrams are taken with the driving seat in the central position of fore and aft adjustment and with the seat cushions uncompressed.



The forward section of the front windows and rearward section of the rear windows have a sliding action, the other glasses being fixed. In front a pivoting safety glass panel is fitted externally, usable as a draught deflector or an air scoop, according to the weather. Also seen are the useful cubby hole in the fascia and the steering column controls for the lights and horn.

Compact grouping of controls, which are unconventional as regards the starter (above the hand-brake lever) and the choke, seen alongside the base of the gear lever. The driving seat has been moved behind its normal range of adjustment to show the controls.



The spare wheel can be lifted on its mounting for access to a limited amount of luggage room. Right in the nose, within this compartment, is the battery, in a metal container and very accessible, as also are tools, fuses, and brake fluid reservoir.



throttle pedal does not provide an ideal position for the right foot, and is inclined to be a little jerky when a sensitive action is wanted, as, for instance, in accelerating from low speed on top gear. The hand-brake lever is extremely well placed between the front seats and is really powerful for holding the car on a hill, being easy also to release. The front floor is entirely flat, no mechanism passing beneath it other than control linkages.

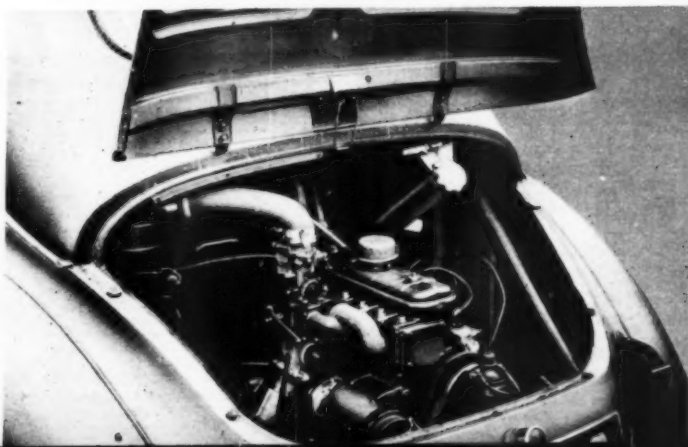
Horizontally sliding windows are fitted and it is not possible for the driver to put his head out, or even to extend his arm to give a hand signal, as the forward doors carry glass flaps which act as either draught deflectors or air scoops for ventilation in hot weather. But reversing is very easy by virtue of the modest overall dimensions of the car and a fairly large rear window. An adequate view is not given by the driving mirror, which is mounted at the top of the windscreen. Twin screenwiper blades are fitted; the electric motor is under the fascia and is noisy. The horn note is weak; the head-lamp beam is adequate to the performance, but could well be stronger or more effectively adjusted, especially in the dipped position. Combined with the ignition lock is a steering column lock. An electric clock is fitted, there is an ammeter, and oil pressure and engine temperature indication is given by a red warning lamp which also combines the function of the usual ignition warning light. The speedometer embodies a resettable trip recorder.

Exceptionally good engine accessibility is given by the rear-engine arrangement, and there is a most useful under-bonnet lamp. A certain amount of luggage space is provided under what would normally be the bonnet, and there also is carried the spare wheel, or rather tyre and rim, for the wheels are of the "spider" type bolted at the rims. In all there are three tail lamps.

A good opportunity of testing starting from cold was afforded by the car's standing out during several nights in which the temperature fell four or five degrees below freezing point, the windscreen being frosted on two occasions. The engine fired instantly and required very little use of the choke before pulling steadily. Engine temperature can be regulated by a simple blanking blind for the radiator, which can be adjusted to three positions. There are ducts to lead warm air blown by the normal fan into the body, where in the floor of the front compartment is a small exit grille at each side, closed or opened by a flap. A certain amount of warmth is introduced by this means, but not to a really effective extent for weather below freezing point.

In a number of details the Renault 760 may not attain quite the degree of refinement to which British motorists have become especially accustomed, but it has abundantly shown itself able to provide a thoroughly practical, pleasant and economical form of motoring.

The four-cylinder overhead valve engine is extremely neat and thoroughly accessible as regards all auxiliaries. Note the petrol filler, above which is a bulb for illuminating the engine compartment. The big oil filler in the valve gear cover is specially commendable, as also is the placing of the sparking plugs, dynamo, ignition, distributor and the camshaft-operated petrol pump.





BY JOHN  
DUGDALE

THE AUTHOR OF THIS STIRRING ACCOUNT OF ANDES MOUNTAINEERING, AT HEIGHTS WHICH ARE SCARCELY KNOWN IN EUROPEAN MOTORING, WILL BE REMEMBERED BY MANY READERS AS A PROMINENT MEMBER OF THE AUTOCAR EDITORIAL STAFF FOR MANY YEARS. HE IS NOWADAYS WITH THE ROOTS ORGANIZATION IN SOUTH AMERICA, UTILIZING HIS WIDE EXPERIENCE IN FURTHERANCE OF THE EXPORT DRIVE

## B.A. to La Paz— an Andes Adventure

A BRITISH LIGHT CAR COMPLETES THE TOUGH 2,000-MILE OVERLAND ROUTE FROM BUENOS AIRES TO LA PAZ, BOLIVIA—MOUNTAINEERING CONDITIONS OF A SEVERITY UNKNOWN IN EUROPE—MORE THAN 500 MILES AT 11,000 TO OVER 14,000 FEET . . . . . PART I

IT had been decided to drive a Hillman Minx Mark III from Buenos Aires on the Southern Atlantic coast, across the great flat river basin that is Argentina, up to its most northerly province of Jujuy, and thence to cross the border into Bolivia, through to the capital La Paz. This is a journey of about 2,000 miles, the first 500 of which consist of fast paved roads and the last 500 of which are at an altitude always in excess of 10,000 feet and sometimes rising to more than 14,000 feet. It was felt that not only would this be a most thorough demonstration of the capabilities of the Hillman, especially if the route could be completed without the engine modifications usual at such

altitudes; but also that it would give unique practical experience of motoring continuously at over 10,000 feet, experience which is quite unobtainable in Europe.\* The results would be useful because in Bolivia this altitude is a normal condition of travel, as well as in the far north of Argentina, in Chile and especially in Peru. All these markets are of gathering interest to the British automobile exporter.

The trip proved to be a strenuous but enthralling one, and if anyone wishes to give a car the severest possible export test in country of impressive wildness and natural grandeur, Bolivia can be recommended. You need a willing car, plenty of time, the outlook of a traveller in the Middle Ages, and a good heart action.

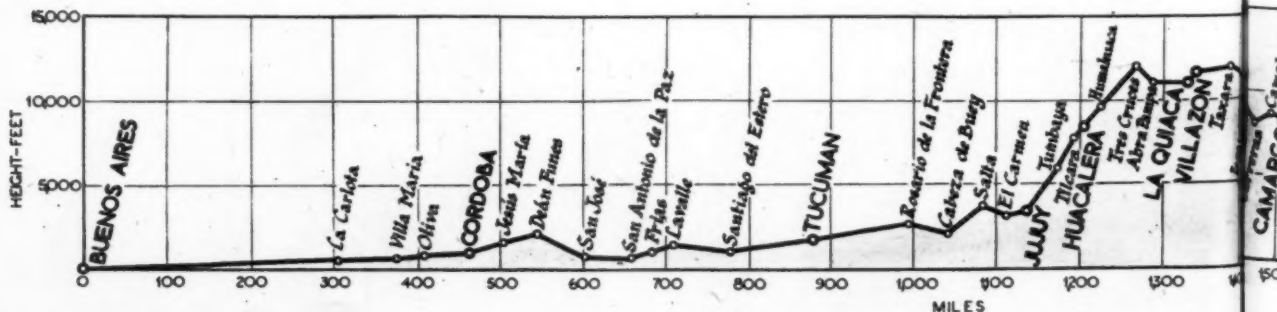
The trouble is that Bolivia consists in its western half of two ranges of the Andes mountains. In the east the country slopes steeply towards the sea-level jungles of Brazil and Paraguay. But it is in the west that the main cities are grouped and it is among these lofty mountains that the tin and silver mines—main source of income to this inland country—are tunnelled. This means that the majority of the population live at great altitudes, almost certainly over 12,000 feet, because the capital itself is at 11,988 feet and yet is below the surface of the main plateau or "Altiplano." This word "High Plain" may give a mental picture of long, flat, easy roads, but the motorist finds none of such pleasures in this merciless land.

The run from Buenos Aires westwards to the gentle hill country round Cordoba is well known and on those long straight roads the average speed is limited only by the car's maximum and the driver's discretion. We had set forth in glorious spring weather in the last days of September. But the sun which brightens as far as Cordoba beats with less mercy when one heads north to the next large centre of Tucuman. This, for Argentina, is a day's journey of 375 miles or so. Not so far, perhaps, even by European standards, but doubled in its exhausting effect on driver and passenger by being over indifferent dirt-

Humahuaca, near Jujuy, Northern Argentina—a Spanish colonial style church.



\* It is believed that only two road passes in Europe reach 11,000 feet: the Col d'Iseran in France and the Pic Veleta in Spain.





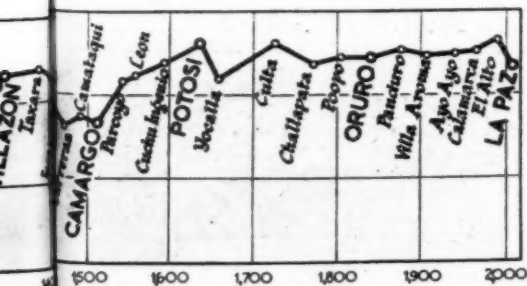
Jujuy, Northern Argentina—a windswept valley.

surfaced roads. There are great salt lakes (like those of Utah) and the hot, sandy deserts of Santiago del Estero to be crossed; the sweet water for this barren district has to be brought in by train. One way or another you will be lucky if you get from Córdoba to Tucumán in less than twelve hours' elapsed time. Driving carefully on the way north, we took 12½ hours' running time, but on our return five weeks' later the call of home was such as to reduce this to 11½ hours. Such a full day's motoring seems greatly reduced if a really early start is made in the cool of the day around 5 a.m.

All the time this road to the north is rising imperceptibly, bringing one by easy stages from 1,270 feet at Córdoba, 1,430 feet at Tucumán and 3,890 feet at Salta to 4,130 feet at Jujuy. These are well spread out and easy hops in preparation for the big jump north of Jujuy on to this so-called Altiplano. They serve to get car and passenger alike accustomed to the rarefied heights ahead, when both human being and machine suffer from similar breathing difficulties.

When one takes the aircraft into Bolivia from an airport at sea level one often suffers acute discomfort on arrival at La Paz because of the lack of oxygen. This takes the form of a painful ache at the base of the skull and behind the ears, difficulty with digestion, and possibly nose bleeding. It is the same when you enter Bolivia by train—one of the highest railways in the world and, incidentally, British—from the Pacific coast and climb to more than 15,000ft before dropping down to the capital. En route rest places are provided for passengers suffering from this mountain sickness. But the car, taking one gradually to altitude, enables one to become acclimatized more easily. Within about a week the body has usually adjusted itself and Europeans resident in Bolivia play golf and ski without ill effect.

Whereas the efficient human mechanism is automatic in its adjustment to altitude, the car must be altered in its specification in order to obtain optimum results. We hoped to get through with the Hillman in standard condition and



Driving Days	Overnight in	Mileage (total)	Mileage (intermediate)	Altitude (feet)
1	Rosario	228	228	1,269
2	Córdoba	535	307	1,430
3	Tucumán	948	413	4,129
4	Jujuy	1,218	270	—
5	Huscalera	1,296	78	—
6	La Quiaca	1,423	127	11,290
7	Camargo	1,603	180	8,856
8	Potosí	1,725	122	13,316
9	Culmenarca	1,817	92	13,776
10	Oruro	1,934	117	12,156
11	La Paz	2,099	165	11,988
(114 miles in area of La Paz)				
12	La Quiaca to Huscalera	2,337	124	11,290
13	Jujuy	2,401	64	4,129
14	Tucumán	2,666	265	1,430
15	Córdoba	3,080	414	1,269
16	Buenos Aires	3,570	490	0

## B.A. to La Paz— An Andes Adventure

—continued—



... And so from Villazon into Bolivia—with the road running for twenty miles down the bed of a river.

only to make adjustments in La Paz or when forced to by lack of power. We were prepared to fit smaller petrol jets, larger air inlet, and a higher compression cylinder head. As it turned out none of these proved essential and our modifications amounted to the insulation with rubber tubing of exposed brake and petrol lines beneath the car; an extra leaf in the rear springs; and the disconnection of the air cleaner on the loftiest section of the route. Otherwise this was an ordinary 1949 Minx, with nearly 10,000 miles on the clock, carrying two people weighing between them 400 lb, and an amount of luggage and spare kit of probably another 250 lb, which appeared excessive when we once saw it unloaded all at once! There were two massive suitcases, two brief-cases, two overnight cases, a torch, a camera and typewriter, three Thermos flasks, a rug and a tarpaulin; all these being carried in the rear compartment inside the body, in order to keep the weight forward as much as possible. In the luggage locker were two spare wheels with tyres, a full jerrican, a spade, the spare cylinder head, and an extra toolkit of ring spanners. Two other items which experience showed us would have been worth having were a car radio and an altimeter.

So much for the car preparation. Between Salta and Jujuy, we had an opportunity to limber up for twisting mountain roads. There is a delightful little pass, apparently nameless and known only as the Corniza. It rises, at a guess, to 6,000 or 7,000ft and is so engineered that all the curves—and there are hundreds of them—follow one another in easy sweeps with scarcely a hundred yards of straight between them. It would be arm-aching with the low-geared steering of a large American car on that narrow road; but the Hillman seemed exactly built for it. The country hereabouts is charming, the road rising from a broad and stony river bed to semi-tropical forest,

with rare parasites hanging from the hardwood trees. Through this profusion, the busy driver, if he dares to take his eyes off the twisting road for an instant, will catch glimpses of blue peaks far away.

The north of Tucuman and the south of Salta provinces look to me like the fairest parts of Argentina. It is here, with the purple backcloth of the foothills, with lush pastures and fertile, intimate valleys, that I would have an estancia, if I were the sort of person to have an estancia. It is European in its feel and scenery. One small town is even called Schneidewind and at any moment one expects to see the broad walnut eaves of a Tyrolean chalet. But farther north, Jujuy is Indian country, and quite different from the rest of Argentina. There, one might have already crossed the border, because the people are differently dressed, the women in that strange uniform hat which is best described as a bowler, their children carried pick-a-back in bright handwoven ponchos.

And from here it is that the struggle with the Andes mountains begins.

### Awe-inspiring

The road due north from Jujuy to the Bolivian border has been something of a legend. Before the national highway system of Argentina became so efficient, it was even regarded with a certain amount of awe. In 124 miles it rises nearly 8,000ft, from 4,130 to 12,000ft. In one narrow ravine it consists only of a river bed, usable in winter but increasingly impassable in summer as the snows melt and the water level rises to wash the track away. We counted thirty-five shallow fords, which did little more than cool the tyres, slow our average speed, and create a certain amount of apprehension, because all and sundry had filled us with fearful rumours of this pass. At the highest point, Tres Cruces, is a mine and the road is, in fact, used almost exclusively by the mining community, lonely branch roads stretching out sometimes for hundreds of kilometres into the mountains towards their isolated outposts. There is an occasional oasis among these barren rocks. At Huacalera, exactly on the Tropic of Capricorn, is a pretty narrow valley with a surprisingly good and modern hotel, the Monterrey. Humahuaca is a picturesque, tidy little town and the last station of the Argentine Automobile Club; and from there on the motorist must fend for himself until he reaches the frontier town of La Quiaca.

Already one can sense the aspect of Bolivia on the face of this airy countryside. Indians, plodding vast distances on foot, panic at the sound of the car and thrash their

#### HILLMAN MINX, BUENOS AIRES TO LA PAZ, AND RETURN—OCTOBER, 1949

PETROL CONSUMPTION (accurate measurement was not possible as refuelling was sometimes done from cans).

Córdoba to La Quiaca	894 miles	37.4 m.p.g.
Villazon to La Paz (1)	671 miles	26.6 m.p.g.
La Quiaca to B.A. (2)	1,364 miles	40.4 m.p.g.

Notes: (1) 8,000 to 14,000ft all the way, over the mountain roads, with standard petrol jet. Much low gear work.

(2) With smaller petrol jet, mostly over level roads.

trains of donkeys or llamas off the road. The light of the sun, unbroken by city smoke, burns with a cosmic glare. From the summits the world stretches farther than the eye can strain, to peak on snow-capped peak—and for photography, conditions are perfect. Sometimes a volcanic spasm of aeons ago has burst open the earth and revealed inner strata of carmine and viridian. The Indian villages of adobe merge into the ochre earth on the best principles of Frank Lloyd Wright. Suddenly the broken top of a dusty hill becomes the twin towns of La Quiaca and Villazon, which bestrides the Argentine-Bolivian frontier.

For some sixty kilometres before the border, the road has led flat across the Altiplano and one actually began to get the impression that all would now be plain sailing, or rather smooth driving, to the distant destination. We received a rude shock, for it turned out that only in Bolivia did we really start to climb mountains and cross rivers. That "high plain" proved mysteriously elusive, as our difficulties multiplied.

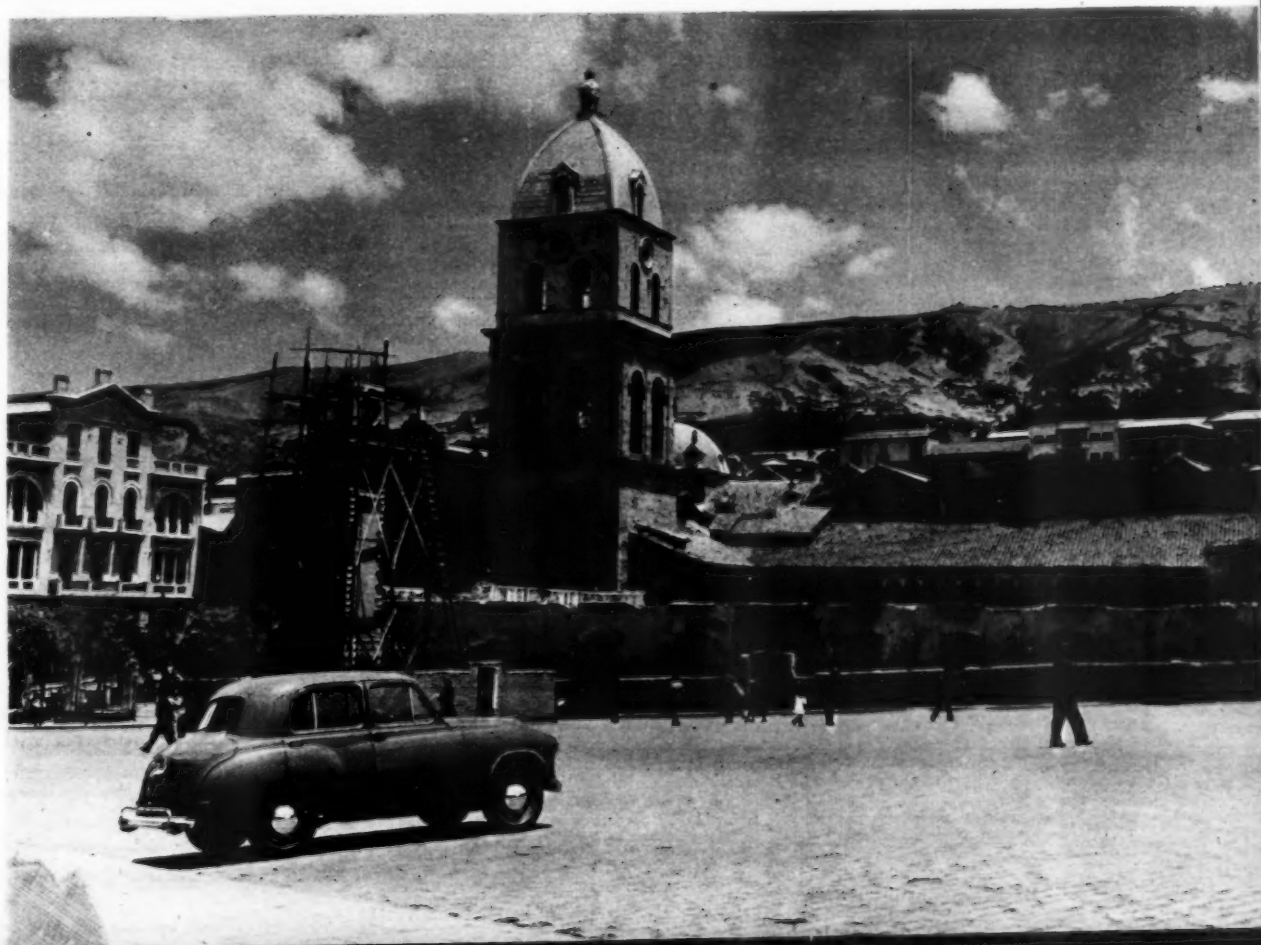
There were several reasons why we entered Bolivia with some trepidation. It is a remote country, difficult of access, with an almost hopeless internal communications problem. The result is that news of Bolivia is hard to come by. Three weeks before there had been a serious revolution in which the rebels had for a time controlled the southern towns. It was not possible to obtain any respectable road maps or, in fact, anything better than a school atlas.

After spending half a day—a normal allowance—crossing the frontier, we went to the Bolivian transport office in Villazon for information. This is not a tourist office but

Next week the author describes his motoring experiences with the Minx in Bolivia. The picture shows the preparation for a festival dance which was to take place when he passed through Villa Aroma (all the dancers are men and the revels may last for three days, the participants being reinforced by local alcohol). Below is his destination, La Paz, the capital of Bolivia, with the fine 17th-century church of San Francisco.

a control for all vehicles on the roads, something like the air transport control for aircraft crossing from, say, Northern Ireland to England; but whether they send to your rescue if you fail to check in at the next control is very doubtful! Here a willing Bolivian sketched us a map freehand and with this, which later proved quite sufficient for route finding, we started for the interior. "Take a pick-axe," was his parting advice.

(To be concluded)





## New All-metal Caravans



Left: Corner of the end-kitchen of the Silver Knight 15, showing the kitchen cupboard and plate rack above. A corner of the dinette table and snack bar can also be seen. Right: The paraffin stove and above it the airing cupboard, always an important contributor to holiday comfort.

**C**OSTING £659 complete, the new Silver Knight 15, which was formerly called the Holiday Knight, is built on the unusual principles employed by Coventry Steel Caravans, Ltd., of Exchange Works, Market Place, Warwick. The shell, which takes the stresses, is a skin of interlocking aluminium alloy sections, riveted on the inner side. It is

anodized externally, backed by a rim thickness of board, and lined with leather cloth. This caravan is a four-berth model, with a central dinette and convertible settee. There is an end-kitchen at the front, with a large gas stove and plate rack. The central compartment contains a paraffin stove, which heats an airing cupboard, and the interior wood

fittings are of exceptional finish and quality.

Without any interior furnishing, the Silver Knight 15 is available for £395, or £405 with a stable type door, as illustrated. The metal strip construction and unusual porthole windows at front and rear give the caravan a distinctive appearance.

## CLEE HILL CLASSIC : SHROPSHIRE COURSE AFFECTED BY BAD WEATHER

**L**AST Sunday morning dawned fine and bright in Shropshire, to the delight of the competitors in the Hagley and District L.C.C. Clee Hill Trial. Unfortunately, as the day wore on, the weather deteriorated; the evening was graced by a torrential downpour.

However, none of this as yet overshadowed the crews as they left the start at Ditton Priors and moved off to Nordybank, the first hill. Some augury of conditions to come was given by the fact that no one could climb this, while only two competitors were successful at Long Lane. From here the route led to The Yeld, a muddy, rutted section with an acute corner at the foot which prevented competitors from rushing. It was left to Ken Wharton to register the only clean climb.

After two more observed sections

came Cleeton Crawl, a bumpy zigzag on a steep piece of open moorland. Here the ascent of each competitor was timed, this serving as one of the two tie-deciding tests.

Fastest here was easily Wharton, although a very fine performance was put up by Miss H. B. Kemble, Ford Special, who made third fastest time.

After lunch some of the earlier sections were covered again, and the distances achieved up The Yeld were recorded as a second test. Following Long Lane once more, came Neenton Hill, which for the early numbers was a sea of glutinous mud, but which was conquered by C. R. L. Nicholl's V8 Special and thereafter became progressively easier. Finally came Meadowley Wood, which (as Lye Wood) had proved unclimbable in the Vesey Trial.

However, for inexplicable reasons, it was now less severe and N. V. Terry (Dellow) became the first to record a clean ascent, followed by R. G. D. Smith (Fairley) and Wharton.

### PROVISIONAL RESULTS

Club Cup and Navigator's Award (best performance): Wharton 1,172 (K. Wharton).

President's Prize (best class A): Austin 747 (P. A. Atkinson).

Committee Cup (best class B): Regent 1,785 (J. Readings).

Bromsgrove Cup (best H. and D.L.C.C. member): Fortin 1,172 (S. A. Cracknell).

Navies' Award: Fairley 1,172 (R. G. D. Smith).

Team Award: The Triers (K. Wharton, P. A. Atkinson, J. D. Sleeman).

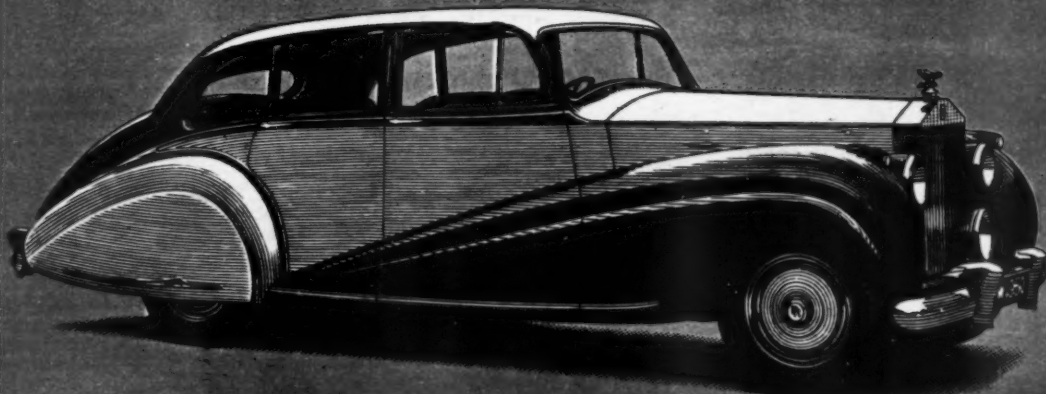
First-class awards: Austin 747 (A. Jeavons); Riley Spl. 1,503 (K. B. Bailey); Dellow 1,172s (N. V. Terry); Wolford 1,172 (H. B. Woodall); Dellow 1,172 (L. J. Tracey).

Second-class awards: Morris 918 (B. B. Lindon); Allard 3,917 (K. E. O. Burgess); Pansy Spl. 1,172 (E. B. Wadsworth); Sleeman Spl. 1,172 (J. D. Sleeman).

58 entries; 10 non-starters; 4 non-finishers.



*Artistry.* "Art is the expression of man's joy in his work." Among fine examples of the craftsman's art is this Cup and Cover (London hall-mark 1894-95, maker's mark C.G.) In the Victoria and Albert Museum, London.



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**DUNLOP 'FORT'**

*In a Class by Itself*



In the middle of the Wednesday morning the snowfall eased slightly on the downhill section into Grasse. Here can be seen a Renault, with snow-packed front, following the slushy tracks of its predecessors; later the snow restarted and towards dusk the road was again completely obscured.

## MONTE CARLO FINALE

**I**NEVITABLY, looking back on a big event such as the Monte Carlo Rally, there are certain vivid personal memories which stand out from the kaleidoscope of events which have been crowded into those few hectic days. This year's event has been productive of so much excitement and incident as to make selection difficult, but among the things which spring immediately to mind are the sight of the first competitor—French racing driver Louis Rosier in his baby Renault—hurtling towards me over the snow in the mountains overlooking Grasse, and the subsequent appearance (some time later) of another Renault at the same point first sideways and then backwards, to end, fortunately, in a snowdrift and not through the low retaining wall. It was at this spot, also, that *The Autocar* photographer, insecurely balanced by the aforementioned wall, was almost annihilated by a well-known British competitor with his Allard. He subsequently moved at great speed in search of a safer point of vantage.

Then, of course, there was the sight of one battered car after another arriving in the final control, weary competitors spilling out on both sides to face the glare of flash bulbs, and immediately climbing back into their machines to undergo the acceleration and braking test—in a good many cases with little acceleration and even less braking. And the stories told at the finish and during the subsequent celebrations were certainly up to standard and lost nothing in the telling, such as the veritable odyssey related by the amusing English-speaking Dutch journalist, who, unable even to drive a car, had accepted a rear seat in a competing car in the course of duty. The things which had happened to that car would have daunted most enthusiasts, and their effect on a layman may well be imagined.

Even the President of the Bentley Drivers' Club, being

The magnificently appointed navigator's compartment in Lieb's Mercury, which won its class in the Concours. On the left of the illuminated map table is a card index of towns and distances; above are ranged different types of chronometer, while on the seat can be seen the strip map of the route, arranged to run between rollers for ease of handling.





Here are the five cars which alone completed the road sections of the Rally without loss of marks. Left to right, the victorious Hotchkiss, Gatsonides' Humber, and the three Simcas of Scaron, Quinlin, and Dr. Angelvin.



The Rally winners, M. Becquart and H. Secret, proudly displaying the Coupe de l'International Sporting Club at the prizegiving ceremony.



On the left is seen the state of the big Rolls-Royce after its crash at Tain l'Hermitage in the early hours of the Wednesday morning. Nevertheless, temporary repairs were executed and the car reached Monte Carlo, where a new wing was made and fitted in time for its appearance in the Concours—in which, as already related, it won the Prix d'Honneur.

Below can be seen the well-fitted locker of F. D. Cooper's Riley, which gained a coachwork plaque in the Concours de Confort. Because its registration number is KLM 1, it was adopted by Royal Dutch Airlines, who not only provided refreshments and guides for its Rally journey, but also supplied the magnificent cake seen (inset) with the drivers.



conducted at high speed over the mountains in a blizzard in the rear seat of a modern car, was heard to remark that his four-and-a-half would not have got round at least the last two corners, which, as Bentley enthusiasts will realize, is no mean admission. Also, there was the famous driver who wished to know when the new Rally model Allard would be in production—the one with the new-type concave cowl and bumper of which he had seen several prototypes arriving at the finish. Of course, as the later cars arrived, the stories increased in horror until what had been a lorry blocking the road became at least five, complete with trailers, to avoid which the crews had had to carry the cars across ploughed fields. But it was surprising how many people, alleged by the earlier arrivals to be upside down, over the edge or hopelessly smashed, continued to arrive.

The continued success of the Hotchkiss *marque* was naturally outstanding, especially as this year Trevoux was not among the drivers. The winning car, which was a 1939 model, had very little in the way of special modifications and equipment and emphasis seemed to have been placed on keeping down weight and preserving the excellent power-weight ratio, which, of course, together with fairly high geared steering and excellent handling qualities, are the main factors which make these cars so suitable for this type of event. The big Humber, which finished second, was somewhat handicapped by size and weight, and for Gatsonides to keep time across the worst sections of the winding mountain road was a magnificent performance.

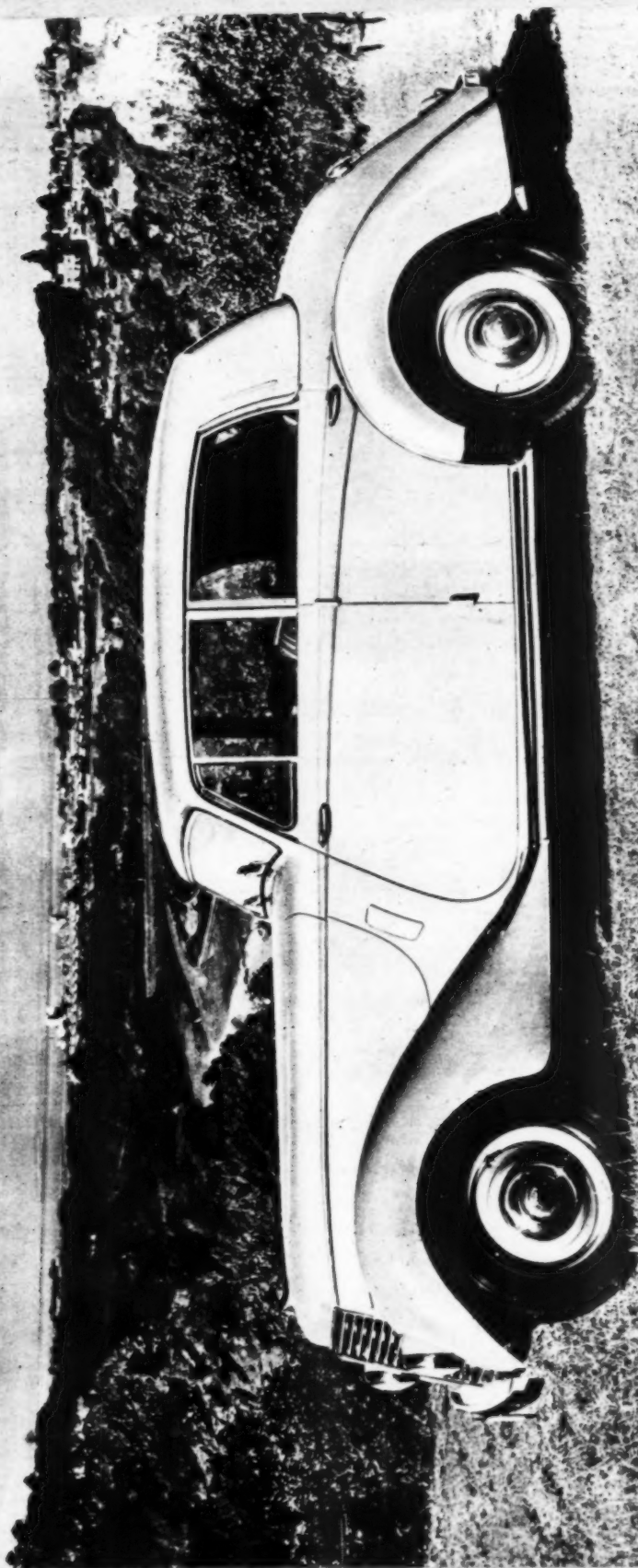
Anyway, now this year's Rally is just a wonderful memory, and it remains to be seen whether next year can at last bring a British victory—which, alas, would be the first since Donald Healey's success with the Invicta in 1931.

J. A. C.

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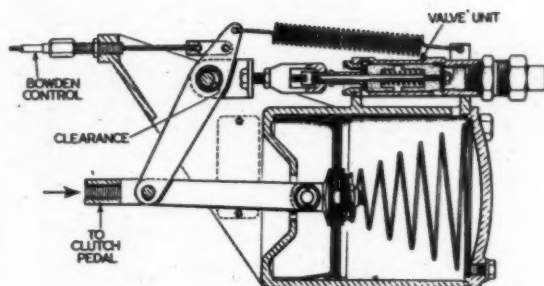
ARMSTRONG SIDDELEY



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AN  
EYE  
TO  
THE  
FUTURE**

*Motorists who remember the excellent quality and consistent reliability of pre-war CLEVELAND petrols keenly look forward to the return of branded motor spirit.*

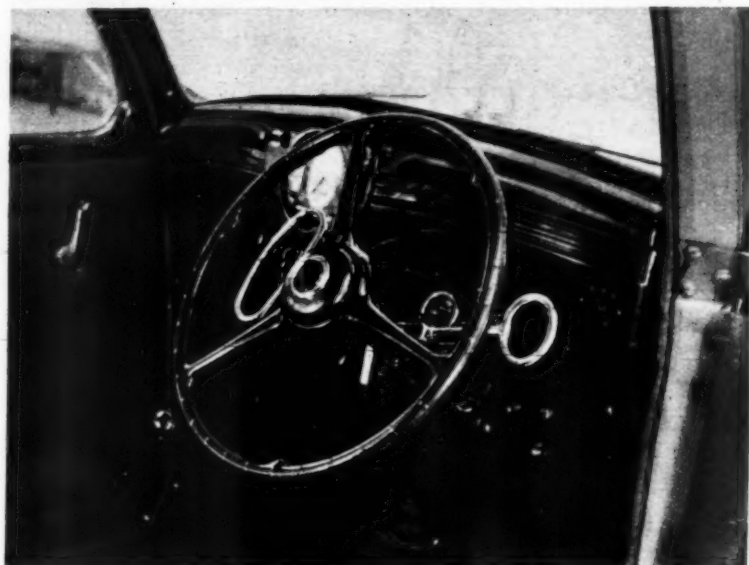
*And when that day comes the younger generation will find a new pleasure in the smooth running and additional power which CLEVELAND petrols assure.*



A sectional view of a Clayton-Dewandre servo motor.

## Controls for the Disabled

CLAYTON - DEWANDRE SYSTEM  
APPLIED TO FORD ANGLIA



A SYSTEM of special controls for disabled drivers can now be fitted to the Ford Anglia by Thomson and Taylor (Brooklands), Ltd., of Weybridge, Surrey. This method of control, powered by Clayton Dewandre servo motors, is very similar to the Hillman Minx conversion devised by the firm in conjunction with the Rootes Group, described in *The Autocar* of January 31, 1947. The price of the Anglia conversion, including fitting, is £70 on current costs of labour and materials.

The original controls are retained so that the car may be driven in the normal way.

Hand controls for a legless driver fitted to a Ford Anglia. The left-hand control operates the servo brake when pulled towards the steering wheel rim. The control will traverse parallel with the steering wheel without actuating the brakes. The right-hand lever operates the clutch when pulled towards the wheel rim, and the throttle when it is rotated clockwise.

## Road Review for General Election

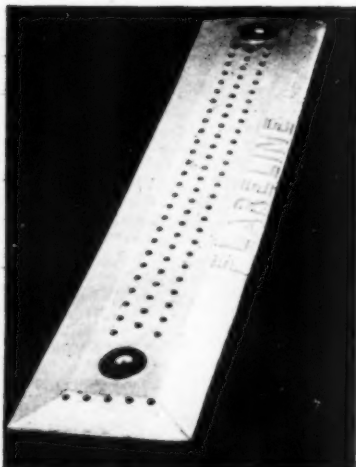
IN preparation for the general election, the Roads Improvement Association has recommended that interested voters, of either party, should put their questions to their candidates direct, and has issued some general information on the British road network.

The memorandum points out that the waste caused by inadequate roads, congestion and accidents is costing the community £2,000,000 a week. If, during the last three years, the work contemplated by the 10-year road programme had been carried out this waste would already have been cut by 50 per cent.

Roads are in a worse condition now than they were 15 years ago, and the Association quotes Mr. Barnes, Minister of Transport, who said that "the roads today are hopelessly behind current needs."

The Association recommends that the 10-year plan be put into operation forthwith because widespread benefits, including a substantial reduction in accidents, would accrue very rapidly.

## Combining Cats'-eyes and White Line



A NEW system of road marking has been developed by Industrial Chemicals, Ltd., Victoria House, Southampton Row, London, W.C.1. Called Flareline, when reflector-fitted, and Lifeline, for normal white line marking, it consists of plastic strips which are cemented to the road to form permanent markings of the regulation size. It is claimed that the strips will last for as long as three years, which is said to be an advance on anything formerly available. The Flareline system has rows of small beads of specially hard Czechoslovakian glass embedded in the plastic, which reflect head light beams to form a readily seen marking. The strips—some of the Lifeline pattern are at present in use on certain roads in London—are impervious to oil and other deterioration.

Flareline costs 4s 6d a unit and Lifeline 3s 6d, which compares very favourably with other methods. The West Sussex County Council are using Flareline units on a stretch of the Selsey to Chichester road.



The ferry over the Thames at Bray, Berkshire—a winter impression by Gordon Horner.

## CORRESPONDENCE

OPINIONS EXPRESSED ON THESE PAGES ARE THOSE OF OUR CORRESPONDENTS, WITH WHICH "THE AUTOCAR" DOES NOT NECESSARILY AGREE. LETTERS INTENDED FOR PUBLICATION SHOULD BE ADDRESSED TO THE EDITOR, "THE AUTOCAR," DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1.

### GHOST WINDS

#### An Unusual Phenomenon of Coasting

[62463.]—As many drivers coast downhill under suitable road conditions nowadays, I wonder whether anyone else shares my near-conviction that, if the engine is revved up quickly in these circumstances, a momentary retarding effect is felt, as though the car were being braked, or had met a head-on, violent gust of wind?

I have ventured to say this to passengers at the time, and also to the local enthusiasts over the thought-provoking noggin, but I seem to be in a minority of one, and—as this effect is not recorded, so far as I can observe, by the average speedometer—I can only assert, rather unscientifically, that I "feel" it.

My own untutored idea is that it is owing to some sort of gyroscopic influence momentarily resisting the momentum of the car. I think, too, that it is most noticeable in cars with very flexible engine mounting.

F. P. H. LEEMING.

London, E.11.

### MOTERING BROADCASTS

#### Excellent Example of Monte Carlo Rally

[62464.]—Having followed the B.B.C.'s running commentary on the Monte Carlo Rally I wonder why we cannot have more such excellent commentaries on events such as Le Mans, Silverstone, Shelsley, Prescott, Goodwood and others by men who know.

IAN M. ROBERTSON.

Bristol.

### TANK CORROSION

#### Advice as to Prevention Method

[62465.]—I have a 1936 Ford Eight. The petrol tank is badly corroded inside. The construction of the car is such that to remove the tank would be difficult, and to replace it with surrounding fairings and so on extremely difficult. Further, I

have perforce to lay the car up for periods of five or six months at a time whilst amassing enough basic coupons to make it worth putting on the road again.

My problem is to minimize further corrosion to the inside of the tank, the drain plug of which is rusted in position.

The solution I have adopted is to disconnect the feed pipe between tank and pump, and, having siphoned the remains of the petrol out, to fill to the brim with paraffin, thus excluding air. On taking out the car, I reverse the procedure.

Does the paraffin itself attack the corroded parts of the tank? Wallington, Surrey.

V. J. BEAUCHAMP.

[Paraffin is not favoured for use on polished and machined surfaces, but should be effective here, although it may loosen scale already formed and lead to further trouble with feed pipe stoppages. The alternative would be to fill with oil.—Ed.]

### CONTEMPORARY DESIGNS

#### "No, Sir, I Do Not Like My New Car . . ."

[62466.]—I read with interest and entire agreement the article by "Palinurus" ("Doubtful Progress," January 27). I took delivery just before Christmas of a new car, and it has all the faults mentioned and some not mentioned. I do not like the front pivoting window, because the vision is obscured, and combined with the thick windscreen pillar of the extremely sloping windscreen, brings the obstruction in a much worse position than with the older type. The front doors are too wide, making it awkward for ingress and egress in the garage. Head lamps are very poor—practically useless. The car gets dirty much quicker than the older type.

Vision generally, front and sides, is not nearly so good. I scraped the rear wing on the garage doorpost the second day I had the car simply because I could not see out of the side window.

I am glad to say that I also own a 1948 18 h.p. car of the same make, which car is well known for its sturdiness and top gear performance with a heavy load, and I am keeping it in preference to the new model. The "old" (1948) model, in

## CORRESPONDENCE

continued

my opinion, is worth twice as much as the new, and is most satisfactory in every way.

Why must we have a strip of metal in the centre of the windscreen? What advantage is there in steering column gear change? Why a row of similar knobs for the controls? I frequently push or pull the wrong one in the dark.

No, Sir, I do not like my new car; I consider its immediate predecessor a better car in every respect.

Two last points: the door locks are of a new type and need a very hearty slam to shut; my family cannot slam them hard enough, and I had one fly open. The turning circle is greater than that of the 1948 model.

Wishing *The Autocar* continued success.

Edgware, Middlesex.

G. A. E.

## BEE LINES

Waywardness of the Species Apis

[62467].—In *The Autocar* of January 13, "Talking of Sports Cars" is sadly wrong because it is suggested that Alfa steering is easy, and it is compared with "bee lines." Tut, tut! Can it be that "D. M." has never seen a bee fly? Please tell him that they journey with considerable zig-zag and also up and down movement, and it would need more than "Wrists of Steel" to keep even an Alfa on a reasonable course should it be inclined to take a bee line.

Whilst we can cause our bees to do many things to our advantage, flying straight, never, except when they are annoyed and within easy striking distance, and then . . .

No more bee lines, please.

W. MOULD,

Great Staughton, Huntingdonshire.

Master Beekeeper.

## H.F. INTERFERENCE

Loss of Performance Caused by Suppressor?

[62468].—Whilst agreeing that suppressors bring advantages to radio and television users, I would suggest to [62433] that there is an effect on performance.

May I quote the following figures obtained under similar conditions on my car?

(a) Car fully bonded, suppressed and screened:		
10 gallons	Miles, 156	m.p.g. 15.6
(b) Car with one suppressor in coil lead:		
10 gallons	Miles, 166	m.p.g. 16.6
(c) Car not suppressed or screened:		
10 gallons	Miles, 175	m.p.g. 17.5

I agree that one set of figures does not prove a case, but with limited petrol what can one do?

Meols, Cheshire.

F. W. BARTLETT.

## STROBOSCOPIC EFFECT

"Seeing Things" a Bouncing Business?

[62469].—Let's clear the matter up, regarding the stroboscopic effect of vehicle wheels.

This illusion, I think, has always been observed from a moving vehicle. The answer, to me, would be that the rate of bounce of the observer's car, sometimes, is at the same speed as the rise and fall of the tread and spokes on the other car, so offering a perfect "still" of the wheel whilst in motion—not stroboscopic.

I've been seeing this for years, particularly on German sets. I hope a learned reader will confirm.

N. ADAMS.

Hamburg, B.A.O.R.

## Example of the Palings

[62470].—In reply to Mr. C. J. Mitchell [62421] may I say that he does not cover the stroboscopic effect produced by a train wheel? The answer to the problem is a defect in the human brain, but the cause can be explained as follows. Imagine a twelve-spoked wheel, each spoke at five-minute (clock) intervals; for the sake of argument let us take the effect produced through the gaps between wooden palings.

When the vehicle passes the first paling the spokes point to 1, 2, 3 o'clock and so on; when passing the second gap the spokes pass through four minutes (say) and the same at the next. But to the human eye it may appear that they move back one minute at each gap, since one minute back is nearer to the original position than four minutes forward. This also explains the effect produced by the moving pictures, where by the time the succeeding frame is taken the spokes have moved forward a fraction.

May I add my appreciation of *The Autocar* to those of many others?

H. M. C. COOKE.

Finchingfield, Essex.

D I

## SLUDGING

Advice Wanted on Preventive Measures

[62471].—I was very interested in an article which appeared a few months ago on crankcase ventilation. The engine of my car, a pre-war Rover Ten, has always been rather prone to sludge formation. I have long suspected that this was because the engine was inadequately ventilated. The only ventilation provided is a small pipe leading from the rocker box to the air cleaner, and I am wondering if your contributor or any reader can give me advice on modifications.

Three simple ideas occur to me, but I don't know which one to adopt: (a) to fit a pipe leading from the crankcase oil filler to the air cleaner; (b) to fit a pipe from the oil filler down to a point just below the level of the floorboards; (c) to fit a small air cleaner directly on the oil filler.

As a matter of interest I bought a Fram oil cleaner some time ago and this has practically stopped the sludge forming, but the oil now remains clear only for a few hundred miles. The engine is in good average condition, and uses about 1 gallon of oil per 1,000 miles.

JACK HART.

Leamington Spa, Warwickshire.

## STEERING COLUMN CHANGE

Famous Racing Driver Does Not Approve

[62472].—Puis je permettre de vous féliciter pour l'article "These Gear Changes" ("Disconnected Jottings," September 9, 1949).

Tous les vrais automobilistes sont entièrement de votre avis et les changements de vitesse "steering column position" sont contraires au progrès (ils sont seulement un mauvais argument de vente).

Je vous adresse mes meilleurs vœux de 1950.

Paris.

RAYMOND SOMMER.

[M. Sommer, who is, of course, the celebrated French racing driver, expresses his disapproval of the steering column position for the gear change in the above letter.—Ed.]

## PETROL

What Have the Organizations Done?

[62473].—In this country we have two august bodies who purport to have the interests of the common motorist at heart. Yet neither the R.A.C. nor the A.A. has made any visible efforts in the past year to get the present insultingly small ration of petrol increased to an amount worth taxing the car for.

Worcester.

PHILIP DAVIES.

## The Horrors of Freedom

[62474].—With regard to Germany and petrol rationing, if it were not so serious it would be laughable listening to the loud cries of righteous indignation pouring forth from our officials because someone has had the audacity to try to free something. The very thought of ending any form of rationing must be heartbreaking to our bureaucrats.

Could this be owing to a vested interest?

London, S.W.1.

C. DERRY.

## REAR LIGHTS

Dazzle from the Back Prevalent

[62475].—Mr. C. G. Biggs' letter [62396] on poor rear lights recalls the famous shaving soap advertisement—"Not too little—not too much—but just right."

Too little is just the right side of illegality, but what about too much?

Several times recently I have been forced to ease back from the glare of brilliantly lit rear number plates, composed of polished chromium figures and letters, sometimes with more polished embellishments in the bright area.

The effect of these units is an unavoidable dazzle through which it is impossible to read the registration number. The dazzle comes from odd high spots here and there on each digit, and the blue brilliance of the polished chrome is as bad as head lamp dazzle on country roads.

Do polished chromium digits comply with the law, which, I believe, used to require white letters and numbers on a black background?

Incidentally, what is the law regarding maximum or minimum lighting at the various points on a car?

Birmingham.

HEADS AND TAILS.

[The law requires that digits and letters shall be white on a

## CORRESPONDENCE

continued

black ground, but a shiny surface is presumably accepted as "white." There are no maximum and minimum limits for lights. All compulsory lights must be visible from a "reasonable distance," which is not defined. No lamp of more than 7 watts power may be kept burning when the vehicle is stationary, and all lamps above 7 watts must be equipped with anti-dazzle devices. The effect of this is to limit side lamp power to 7 watts.—Ed.]

## NEW CAR DELIVERY

## One of the Drivers States Their Case

[62476.]-I have read with interest the letters concerning new car delivery, and, as one who has collected many new cars and commercial vehicles of all makes and types, would like to say that although there are a few collectors who drive with a disregard for the vehicle there are hundreds who drive with care and respect for their mount.

Do readers realize that all these drivers, both men and women, are liable to lose their jobs if they are reported to their employers, which is a simple matter since the collector's firm's name and address is on the front trade plate? And, quite apart from this, all these drivers are experienced enough to know when an engine is "tight" and are therefore able to tell when there is likely to be any danger at all to their vehicle.

Also, some makes and models have quite high running-in speeds, and others are fully run-in when they leave the works. I suggest that the people who complain are usually just out to grumble, and probably do far more harm to their own cars by bad driving and a complete lack of engineering knowledge. Quarndon, Derbyshire. DONALD H. JAMES.

## More Stress Imposed on Test Bench?

[62477.]-The old story has cropped up again. I often wonder whether delivery drivers are not verbally chastised far more than they deserve; especially when one considers that a large proportion of modern cars are now handled by some reputable car delivery company, whose drivers are very efficiently checked by automatic clocks and to whom one can give the highest praise.

Has it ever occurred to the multitude of grouseurs that the large majority of engines are run up to high speeds for a considerable period on the test bench, and possibly much higher speeds and for much longer duration than are obtainable during delivery by road? W. L. WOODWARD, F.I.M.I.  
Doncaster.

## SPEED OFFENCES

## Inability to Challenge the Police

[62478.]-During the past two years I have been summoned twice for exceeding the speed limit and on each occasion I was pulled up by a motor cycle policeman.

I am given to understand by the A.A. that you need not necessarily be exceeding the limit at the time you are stopped, but have exceeded it previously. Under these circumstances you have no chance of checking your speedometer, and if a plea of not guilty is put forward, the evidence of the police is always taken as correct. Therefore, they are now in a position to bring a charge whenever they like, as unless you have a passenger in the car who can confirm that you did not at any time exceed the limit, there is no defence.

Surely it is about time something was done to have the law altered, as in years gone by the police could always bring forward a second constable for corroboration.

London, S.W.16.

F. J. DAVIS.

## NEW FOREST LEGEND

## Did Tyrrell Really Kill the King?

[62479.]-I was disturbed to see, in The Scribe's December 2 note about the New Forest, that he apparently accepts, as fact, Sir Walter Tyrrell's murder (or accidental killing) of William Rufus.

If Tyrrell did kill the king, it is odd that, after his return to the Continent (whence he admittedly fled), he protested his innocence until the end of his life. After all, Rufus was held in a good deal of revulsion by the people of his time, particularly the Normans, and the man who could claim to have cleared him away for a better king and a better man would probably have been more a hero than criminal in the eyes of most. It is significant that he was never prosecuted.

On the other hand, it should be remembered that Henry, William's brother and heir apparent, was also hunting in the New Forest that morning. Henry's later actions, as king, were such as to suggest that he was a man who strove always to do what he considered best for the realm. This is merely speculation.

The Autocar is better than ever. We look forward to Wednesday as "Autocar Day" and enjoy it from cover to cover. I am typing this myself, as such deviations from automobilism disturb my secretary inordinately!

New York, 19.

RICHARD L. REDDY,  
Associate Editor, Motor.

[Thank you, Mr. Reddy, for the interesting historical "deviation."—Ed.]

## MARGINAL CLASS

## Ford Model T Not Suitable

[62480.]-In answer to letter [62430] suggesting resurrecting the Model T Ford, much as I loved this car it would not be practical or safe for modern town traffic conditions, brakes and steering being inadequate.

In 1926 the tourer cost £125 and the two-door sedan £180, if memory serves me right.

Why not resurrect the Model A three-speed car, with four-wheel brakes, costing £180 (two-door saloon) in 1928-1931? This model has a scuttle tank and no petrol pump; it has easy gears, clutch and steering, and no fancy gadgets or frills. But it does possess a rear window blind.

It is a good, safe car. I have owned mine now for five years!

Tunbridge Wells.

JOHN T. G. ROTH.

## RACING FILMS

## Cameras on Cars Would Provide Admirable Record

[62481.]-During the war it was customary on fighter planes to mount a cine camera in the wings of the aircraft. Similarly, would it not be possible to mount a cine camera on the front of a racing car, preferably just behind the radiator grille?

A film taken from such a camera would be of vital interest to those racing enthusiasts who, for a variety of reasons (mostly financial), may never be fortunate enough to enter a racing car. Such a film would also be useful to young and inexperienced drivers.

I have seen some of the aircraft films which, when being taken, were subjected to engine shudder and to the shocks of the machine guns with which the camera was synchronized, and they were very successful. I do not think a camera installed in a racing car would have any rougher a ride.

The normal films seen of racing events give no sensation of speed. Such a film as I suggest would show the track as the driver sees it and that, after all, is the most interesting view of all.

Worcester.

J. B. WILSON.

## MINIMUM DEMANDS!

## Getting Two Jumps Ahead of Competitors

[62482.]-Several things have happened lately which need some ironing out in our motor industry.

First, there was a lot of fuss about some steel which went to the Renault works in Paris. This now appears to be returning to Acton in the shape of body panels for cars which are being exported by Britain to the Dominions.

Secondly, one of our big car manufacturing firms stated that they could not sell their cars in America despite stock car records and devaluation.

Thirdly, another firm has imposed on the long-suffering British motorist a surcharge to pay for losses incurred in exporting abroad.

Surely, therefore, something must be wrong with the design of our cars, not the output or the way they are made. I am not blaming any particular firm, but the majority of our popular car manufacturers. The truth is that we are still clinging to out-of-date principles to a very large extent. Although our cars wear a new look externally, the general mechanical specification underneath has not changed much since pre-war days.

I am not in the motor trade but am very interested in it, and I dare to suggest that our designers should see the red light before it is too late. Both during and after the war

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| 1948 AUSTIN A.40 Dorset Saloon, Grey, Beige leather, 5,000 miles.                         | 1949 MORRIS 'OXFORD' Saloon, Black, Brown leather, 1,000 miles.              |
| 1949 AUSTIN A.40 Devon Saloon, Suede Green, Beige leather, 7,000 miles.                   | 1948 MORRIS 10 h.p. Saloon, Grey, Brown leather, 5,000 miles.                |
| 1948 DAIMLER 2½-litre Drophead Coupe, Grey, Red leather, 3,000 miles.                     | 1948/49 RILEY 1½-litre Saloon, Green, Fawn cloth, 2,000 miles.               |
| 1948 FORD V.8 Pilot Saloon, Suede Green, Beige leather, 5,000 miles.                      | 1948 RILEY 2½-litre Saloon, Black, Fawn cloth, 7,000 miles.                  |
| 1948 FORD V.8 Pilot Saloon, Black, Brown leather, 4,000 miles.                            | 1948 ROVER '75' Sports Saloon, Maroon, Red leather, 6,000 miles.             |
| 1948 HILLMAN 10 h.p. Estate Car, Moorland Grey, Brown leather, 9,000 miles.               | 1948 ROVER '60' Saloon, Black, Red leather, 8,000 miles.                     |
| 1948 HILLMAN MINX 10 h.p. Saloon, Black, Fawn cloth, 6,000 miles.                         | 1948 SUNBEAM - TALBOT '80' Saloon, Gunmetal Grey, Grey leather, 7,000 miles. |
| 1948 Mark III HILLMAN MINX 10 h.p. Saloon, Fawn, Fawn cloth and Red leather, 5,000 miles. | 1949 SUNBEAM - TALBOT '90' Saloon, Gunmetal Grey, Grey leather, 8,000 miles. |
| 1949 Mark III HILLMAN MINX 10 h.p. Saloon, Black, Brown cloth, 4,000 miles.               | 1948 SINGER 'Super Ten' Saloon, Black, Red leather, 2,000 miles.             |
| 1948 HUMBER HAWK 14 h.p. Saloon, Granite Grey, Grey cloth, 7,000 miles.                   | 1949 VAUXHALL 18 h.p. 'Velox' Saloon, Black, Fawn cloth, 5,000 miles.        |
| 1948 HUMBER SNIPE 18 h.p. Saloon, Granite Grey, Grey cloth, 8,000 miles.                  | 1948 VAUXHALL 'Wyvern' Saloon, Black, Brown cloth, 9,000 miles.              |

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## CORRESPONDENCE

continued

period we were not nearly bold enough in experimenting with unorthodox designs, although the Continental constructors did so and have evolved some remarkably successful designs which started on a clean piece of paper and did not try to add or subtract from conventional ideas already in existence.

The following is the car I hoped we should have been exporting to America in 1950:—

The size to be as large as a normal American sedan, using integral construction for the hull and powered by a gas turbine engine similar to the Rover engine described in *The Autocar* on May 14, 1948. The engine to be set transversely in the hull driving through a reduction gear and clutch straight to the front wheels. If some of the money which has been lavished on the Brabazon and ground-nuts had been poured into the development of these car engines and their quantity production, they would probably have been on the market this year.

The next item in the car would be that the engine and drive unit should be easily detachable for exchange service units in a similar way to that of the baby Renault. The car should have all the handling characteristics of the Citroën and Saab and have the quality internal trimmings and fittings for which British cars are famous. Independent suspension should be included for all four wheels, with instrument panel controlled suspension dampers.

The steering should be rack and pinion and the brakes hydraulic, cooled by louvres in the road wheels. The jacks to be built in and hydraulically operated by the brake pedal after turning a tap in the braking system. The wheels should fit on splines with an easy locking device. The windscreen should open and be anti-glare, and a sunshine roof should be provided with Perspex insert and blind; the wing panels should be detachable, so as to avoid expensive coachwork doctors' fees, and the tyres to be puncture-proof, as at present sold in the States.

The battery could be a 6-volt everlasting alkaline iron plate battery, placed so as to distribute weight where required. The bumpers would have to conform to the standard American height and the whole car should have a low centre of gravity to make it almost impossible to turn over.

Knowing the Americans' love for antiques, the instrument panel could have been made from seasoned wood suitably inscribed from the old battleship *Implacable*, if we had not scuttled her in the Channel (the last item not to be taken too seriously).

Well, that's it. Back in 1934 André Citroën made a bold and courageous step which, although then thought to be too daring, has yielded for France a good harvest. RICHARD EARLY.

Reading.

## WARMING-UP

Should One Drive Away from Co'd?

[62483.]—I was recently astonished to read this petrol-saving advice: "Don't waste time and petrol warming up the engine. Get in, start up, and drive off. This is better for the engine, too."

I should imagine there are very few cars that could be driven straight away without being half-choked, which is hardly going to save petrol.

Another point is the effect on the engine itself if the vehicle is put under load before the oil has had an opportunity of circulating, especially with a sleeve-valve car.

London, S.E.8.

K. C. THOMAS.

[No finality is evident in cold-starting advice, but it is generally agreed that the object is to circulate oil to cylinder walls and warm up the engine as quickly as possible, which is best done by putting it under load. The choke is thus used for only a very short time.—ED.]

## DAZZLE

Nothing Below Head Lamp Height?

[62484.]—Mr. W. J. Ricketts hit the nail fairly and squarely on the head when he said that low-mounted fog or pass lamps should be used only in fog or snow [62422].

To combat the menace of dazzle from these lamps, I would like to see the law modified to make it illegal to use any lamp mounted lower than the normal head lamp height except in fog or snow. While on my evening journeys home I have taken careful note of the worst offenders, and am quite sure that more dazzle is caused by the so-called "pass" or fog lamps than by any other kind.

A large proportion of these lamps are so mounted that the beam is projected either straight ahead or tilted upwards, quite often on a floppy bumper that allows the lamp to wobble

violently, and the wide beam ensures that the oncoming driver is dazzled for the longest possible period.

The impression seems to be that if the lamp in use is not a head lamp it does not matter where it is pointing. Surely the best anti-dazzle system is still the pre-war dipped left side-lamp arrangement?

Ashford, Middlesex.

G. MADDISON.

## CONTINENTAL CHALLENGE

French Roads No Avenues of Lawlessness

[62485.]—A word of warning is necessary in connection with letter [62444]. There is an impression in this country that on the Continent, and particularly in France, the motorist can do whatever he likes. Happily there is a freedom from petty restrictions and ridiculous regulations which harass the motorist and handicap industry in England. But that does not mean that any private individual can organize a race or issue a challenge from Paris to Biarritz or any other points.

At one time, when acting as Continental correspondent of *The Autocar*, I was very active in this kind of stunt, which included setting up the first record from Paris to Nice, Milan to Paris non-stop, a six-day *Tour de France* with the late Louis Delage, during which we often covered 600 miles in one day; Paris to Madrid, and so on. While I was prepared to guarantee the authenticity of all the tests in which I took part, it had to be admitted that events of this nature opened the door to all kinds of abuses. On the Paris to Nice run, for instance, several annoying level crossings had to be negotiated, and the gates of these were always closed at night. One driver—who shall be nameless—carried with him a heavy crow-bar and was able to open those gates in less time than it took the sleepy gatekeeper to reach his bedroom window. Also it was known that on a long-distance run a second duplicate car, bearing the same numbers as the first one, could be stationed at some half-way point, and could take up the "race" when it was thought desirable for it to do so.

Louis Delage, whose honesty could not be doubted, organized a *Tour de France en étoile*. As a result the national club, acting in collaboration with the Manufacturers' Association, imposed a heavy fine, or in default, exclusion from European motor shows. As an alternative he had to run the trial all over again under the control of the French club, and with an A.C.F. official aboard.

This condition still remains, and while the *Journal de Biarritz* might organize and control a trial, the drivers and firms taking part in it would lay themselves open to severe penalties. The Sporting Commission of the A.C.F. would pronounce disqualification and probably a fine. The Manufacturers' Association would support this, and if the offender were a foreigner, they would act through the Bureau Permanent to extend the penalty to his home country.

Regarding [62443] Dennis May can connect the ignition wires on an Alfa-Romeo without any fear of upsetting Ing. Jano. This ex-Fiat engineer has been ex-Alfa-Romeo for a great number of years and, as technical head of the Lancia company in Turin, is doubtless quite indifferent as to what is happening to the cars built by another firm in Milan!

Bournemouth.

W. F. BRADLEY.



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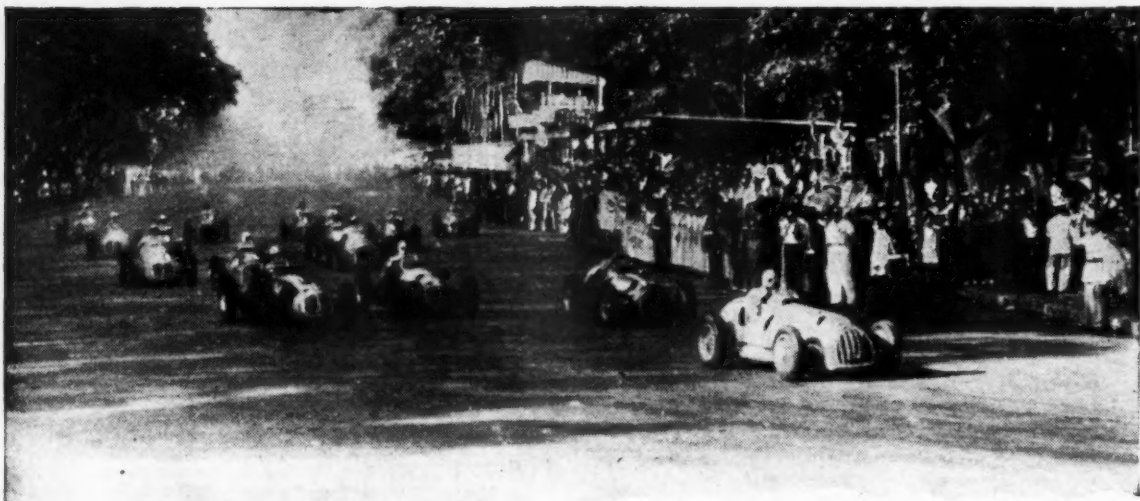
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Juan-Manuel Fangio (Ferrari) in the lead at the start of the Accion de San Lorenzo race, last event in the Argentine series, at Rosario on January 27. He later crashed, without any serious injury, and Villorresi won.

## THE SPORT

Conducted by S. C. H. DAVIS and  
J. A. COOPER, A.M.I. Mech.E., M.S.A.E.

### RALLIES WHICH GIVE BRITISH COMPETITORS FURTHER CHANCES

NOW that the Monte Carlo Rally is over and done with, let us think of the other big rallies which occur later in the year, and hope for a better result as far as British competitors are concerned. There are the Sestriere Rally (almost immediately), the Tulip Rally and the Alpine Trial, to name but three; in the first named, Mrs. Donald Campbell is competing with an Allard and there is also one other competitor from this country. This is not a large British entry, but very little notice was received of this event, which probably accounts for the deficit. However, there will, without doubt, be far more of our rally specialists in the other two events, and it is up to those who are going to take the matter really seriously and to commence their preparations immediately, if not sooner.

Concerning Continental rallies generally, one thing which appears to be playing an increasingly important part in time-keeping is the immense increase of really heavy lorry traffic, especially in France. One absolute necessity is a really powerful warning device, as the standard horn on some British cars, while admirable for town use, is inaudible to drivers in front, specially at high speed.

ENTRIES for the Rallye des Neiges, which will take place on March 17-18, close on February 25, so intending competitors from this country should get busy immediately. The address of the organizing club is Automobile Club de

Suisse (Geneva Section), 19, Rue de la Croix d'Or, Geneva, Switzerland.

THE Automobile Club of Milan is holding the second Coupe Inter-Europa at Monza on March 26. This is a sports car event for saloon and convertible models only, and is divided into two main sections, in the first of which the cars must be of a type of which a hundred have already been sold to the public, while to qualify for the second section twenty-five cars must have been laid down and ten finished. Each section is subdivided into several classes by cylinder capacity; the duration of the race is two hours and the cars must run on 80-octane fuel, which will be supplied by the organizers. There are money prizes for the first four to finish in each class, and entries close on March 19. The race will be followed by a *concours d'élégance* for the finishers.

AMONG the many competitors who are proposing to enter the lists this year with Coopers, whether 500, 1,000 or 1,100 c.c., are B. E. Bradnack, who also drives the B.R.A. Special, and Ken Wharton, who plans to use for 500 c.c. events the twin-cylinder B.S.A. engine which he installed in the Wharton Special for the 500 c.c. race accompanying the first Grand Prix at Silverstone. Other plans for this season's racing are those of Charles Mortimer, who will drive a Silverstone Healey in sports car events in partnership with A. A. Baring (the latter also plans to drive an H.W. Alta in Formula 2 races), Jack Fairman, who is installing his 2-litre Riley engine in a light tubular chassis, and Gordon Shillito,

who is considerably lightening his well-known ex-Harrison Riley.

THE British Motor Racing Research Trust have now opened a public relations office at 113, Park Street, London, W.1, where Mr. G. H. Judson will be pleased to receive any views, plans or assistance in connection with the B.R.M. project. Incidentally, I should make it plain that he will also deal with the formation of a B.R.M. supporters' club on a national basis, the Eastern Counties Meeting referred to last week being merely an off-shoot, as it were, of the parent body.

TONIGHT the M.A.C. are holding their annual dinner; their project for presenting an *équipe* lorry to the B.R.M. team is coming on apace, and among many others the A.C. Owners' Club committee have themselves sent £5 5s to the fund and are appealing to their members for additional support.

SHEFFIELD and Hallamshire M.C. held their annual dinner dance last Friday evening at the Grand Hotel, Sheffield. As always, this was a very happy function; the toast of the club was proposed by Gregor Grant and replied to by the retiring president, E. S. Sneath, while T. C. Harrison welcomed the visitors and Bob Gerard replied on their behalf. The enormous collection of silverware which comprises the club's awards was then distributed by Mrs. Sneath, and following the showing of the film of the 1949 High Peak Trial, dancing continued into the small hours. It had been planned to introduce a racing car into the ballroom, but the



## FEATHER LIGHT STEERING

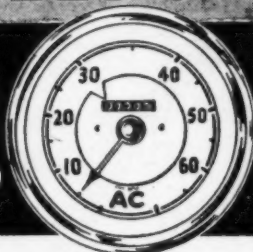
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## THE SPORT

construction of the hotel rendering this difficult if not impossible, a compromise was reached with a model, seated on which several well-known drivers completed hazardous laps of the circuit.

**VETERAN** car enthusiasts, always infuriated by the descriptions of their vehicles in the daily papers, will be overjoyed to hear that no less a person than John Bolster has now been appointed press officer to the Veteran Car Club, which fact should have a salutary effect on all reporters concerned.

**A FORD V8 Special**, driven by D. Whiteford, won the 1950 Australian Grand Prix at an average speed of 72 m.p.h. Run over a three-mile circuit at Nuriootpa, Southern Australia, on January 2, the race covered 104 miles. Organizers were the Sporting Car Club of South Australia—an enthusiastic and enterprising body.

**YOU** will remember my note of January 20 on the brightening prospects for the normal-type car; latest evidence of this comes from the M.C.C., which is making a point of the Land's End Trial on April 8—a short course in the Lynton area—being suitable for the normal vehicle. To this end members of the committee will be going round the proposed route on touring cars and motor cycles.

Fresh interest will attach to the club's Edinburgh Trial at Whitsun in that it will be a night trial, starting just after midnight on Friday, May 26, from a point in the Pateley Bridge area.

**THE** Aston Martin O.C. have recently produced and circulated to their members a register giving, among other details, the chassis, engine and registration numbers of every Aston Martin ever made, together with the name and address of the present owner. While this list is by no means complete, it is a very noble start to something which should eventually produce one of the most complete one-make records of all time.

If any of you know of the whereabouts of an Aston Martin owner who is not a club member, impress upon him the desirability of sending details of his car to the club secretary (D. Coram, 554 Limpsfield Rd., Upper Warlingham, Surrey) to enable the record to be completed. It is, of course, not necessary for him to join the club to do this.

The film show run at the British Council cinema on January 19 was an immense success, including a comprehensive selection of last year's events, and two pre-war German films with a commentary by George Monkhouse.

**THE** Silverstone meeting organized by the above club, which is planned for July 29, is to be named the St. John Horsfall meeting, in memory of "Jock"; the principal event will be a one-hour handicap race for Aston Martin cars, owned and driven by members, for the St. John Horsfall Trophy. Another good event will be an inter-club team relay race, of which more later; this is an excellent scheme, as those who remember the pre-war

Light Car Club and Vintage events of the same nature will agree.

**A**NOTHER firm of booksellers making a speciality of motoring books is F. and D. Stoneham, 1-3, Station Buildings, New Bridge Street, London, E.C.4. This is news which should please the many enthusiasts who work in, or around, the City area. J. A. C.

## CLUB NEWS

**Gemian M.C.**—Mr. Alec J. Decker, an active founder member of the club, was elected president for the next three years at a lively annual general meeting on January 26, attended by some 80 members.

**Harrow C.C.**—Regulations for the Moss Trophy Trial, on March 5, are now available. There will be three classes—up to 1,750 c.c., over 1,750 c.c., and supercharged cars over 1,000 c.c. Competitors will start from the Car Park, Beaconsfield, Buckinghamshire, at 10.31 a.m. at one-minute intervals, to cover a sporting course of approximately 40 miles before finishing at the Royal White Hart, Beaconsfield, for tea. An average speed of 15 m.p.h. has been set.

**North-West London M.C.**—The club's annual dinner and dance was held at the Hotel Rembrandt, Kensington, on February 3. Sydney Allard, the president, was in the chair, and the guest of honour was Kenneth Horne. With the president's recent Rally bid, and the presence of others who had done well in the Rally, Monte Carlo was much in the conversation, but future plans were also mulled over.

**Riley M.C.**—Three meetings planned to take place shortly are the Midland Centre's dance at the Victoria Hotel, Wolverhampton, on February 16. Tickets: £1 5s from R. J. Westley, 50-52, Broad Street, Birmingham, 1; the London Centre's Chilterns Rally, on February 18, followed by a dinner and presentation of trophies at Commonwood House Country Club (those interested should contact R. C. Porter, 159, Castelnau, London, S.W.13), and the annual general meeting of the London Centre, followed by a cocktail party and film show, on March 3. Tickets: 15s from V. O'Driscoll, 7, Seymour Court, Eversley Park Road, London, N.21.

**Lagonda C.C.**—The Night Navigation Trial, on March 4-5, will cover a 66-mile course starting from the Lambert Arms, Aston Rowant, Oxfordshire, at 9.30 p.m., where a buffet meal will be available. Accent will, of course, be upon efficient map reading. Seven other clubs have been invited to compete—the Bentley, North-West London, Lancia, Chiltern, Vintage, Hants and Berks and A.C. Owners' Club. Secretary of the meeting is L. Leo, 58, Holtsur Top Lane, Beaconsfield, Buckinghamshire.

**Berkhamsted M.C. and C.C.**—At a crowded annual general meeting, Mr. Andrew Beveridge was elected chairman of the club in place of Mr. Frank Green, the retiring chairman.

**A.C. Owners' Club.**—All correspondence will, until further notice, be dealt with by Mr. George Origa, of 72, Redcliffe Gardens, London, S.W.10. Mr. B. A. Henry having resigned his position as club secretary through pressure of work.

**M.G. Car Club (Scottish Centre).**—Nearly 1,000 people watched the driving tests at Turnhouse Airport, on January 28. Forty cars, ranging from family saloons to the latest sports models, competed; they were divided into four classes and all took part in the six timed tests, with obstacles and pylons, on the airport's perimeter track.

Provisional results: Primary award went to H.R.G. (J. S. Mitchell); closed car award under 1,500 c.c., Austin (T. Paterson, of the Edinburgh City Police); open car award over 1,500 c.c., Speedy Spl. (G. S. Hendry); closed car award over 1,500 c.c., Austin A.90 (J. E. Wilson). Team award: H.R.G. driven by J. Brown, J. S. Mitchell and W. K.

**Herts County A. and A.C.**—Thirty-two cars competed in the Winter Cup Trial on February 5, but only five finished without loss of marks. The day started with brilliant sunshine, to give way to rain by the time Crowell Hill was attempted. This hill, together with Pyrtan, claimed many victims, and Willis was unfortunate in breaking the differential of his B.M.V. P. Green rammed a tree with his Rover.

Results: Best performance: Ford Spl. (V. S. A. Biggs); best performance by a car up to 1,500 c.c.: M.G. Ford (G. G. Smith); best performance by member of promoting club: Ford (D. H. Shrimpton); team award: Brown Spl. (B. Brown), Allard (W. F. Mead) and M.G. (H. Tucker-Peake). First-class awards: Allard (W. F. Mead), Lotus Spl. (A. B. B. Chapman), H. C. Special (H. Cocker), Allard (E. B. Frost), Alvista (W. E. Edgar). Second-class awards: Allard (G. L. Hancock), Brown Special (B. Brown), M.G. (H. Tucker-Peake), Falcon Spl. (D. G. P. Roberts), Allard (D. Render).

continued

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## COMING SHORTLY

- FEBRUARY 10.**—Cheltenham M.C. Annual motorists' ball, Town Hall, Cheltenham, 8 p.m. to 1 a.m.
- 10.—Kentish Border C.C. Annual dinner and dance, Bromley Country Club, Crown Lane, Bromley, Kent.
- 10.—Stockton and District M.C. Annual general meeting, Headquarters, 7 p.m.
- 10.—Scottish Sporting Car Club. Evening rally, starting 7 p.m.
- 11.—Bristol M.C. and L.C.C. Full Moon Cup Trial, starting Paradise Road House, Bridgewater Road, Bristol, 1.30 p.m.
- 11-12.—Sestriere Rally, Italy.
- 12.—West Hants and Dorset C.C. Hartwell Cup Trial.
- 12.—Maidstone and Mid-Kent M.C. Tyrwhitt-Drake Cup Trial.
- 12.—Southend and D.M.C. and C.C. Touring Trial, starting Rayleigh Weir, Essex, 10 a.m.
- 12.—Lancashire and Cheshire C.C. Standard car trial, starting Car Park, Central Station, Macclesfield.
- 12.—M.G. C.C. (S.E. Centre). Trial, Chilterns.
- 15.—Aston Martin O.C. Gathering, Shakespeare's Head, Joubert's Place, Regent Street, London, W.1., 6.30 p.m.
- 16.—Middlesbrough and D.M.C. Annual general meeting.
- 17.—Lagonda C.C. Annual general meeting, Prince of Wales, Drury Lane, London, W.C.2.
- 17.—Shenstone and D.C.C. Dance and presentation of awards.
- 18.—Midlands Motoring Enthusiasts' Club. Minimum mileage and route finding competition, starting 6.0 p.m.
- 19.—Southsea M.C. President's Trophy Trial, starting Huts Hotel, Hindhead, Surrey, 10 a.m.
- 19.—Cemian M.C. Kent Cup Trial.
- 19.—Lothian C.C. Half-day Trial, Scotland.
- 19.—Sheffield and Hallamshire M.C. Harrison Trophy Trial, Derbyshire.
- 20.—Middlesbrough and D.M.C. Lecture by R. J. Ginn, with film show.
- 22.—Leicestershire C.C. Annual dinner and dance, Bell Hotel, Leicester.
- 26.—North London Enthusiasts' C.C. Jacobean Trophy Trial, starting Ware, Herts., finishing nr. Hertford.
- 26.—Vintage S.C.C. Bisley Rally and Trial, Bisley.
- 26.—Peterborough M.C. Navigation Trial, Peterborough.
- 26.—N. Midland M.C. Kitching Trophy Trial, Derbyshire.
- 26.—Tunbridge Wells M.C. President's Cup Trial, Kent.

## IN BRIEF

Mr. George M. Goudie, of Paisley, has been elected president of the Scottish Motor Trade Association, Ltd., to succeed Mr. Tom Corrie. Mr. Goudie is a member of the management council of the Institute of the Motor Industry.

The appointment is announced of Mr. James Watt to the David Brown Tractor Group, as assistant general manager of the Automobile Division. Before the war he was with Triumph and Jaguar Cars.

In the caption to a picture of the new Auster Autocar aircraft, the price was given as £1,750. This includes radio and certain extras; the basic price, in flying trim, is £1,500.

Managerial changes announced by the Anglo-American Oil Co., Ltd. include the transfer of Mr. H. W. Legg, formerly divisional sales manager, Midlands division, to the post of manager of the motor fuels department in London. Mr. E. W. Hardiman, the previous fuels manager, has changed places with Mr. Legg and becomes sales manager of the Midlands.

The Hanger Motor Co. (Birmingham), Ltd., main Ford dealers, have opened a new showroom, devoted entirely to the

sale of accessories, in Broad Street, Birmingham. The room is equipped with Flowstyle, a new product of Fisher and Ludlow, Ltd., Bordesley Works, Birmingham, 12. The Flowstyle fixtures are cream, with black plastic counter tops.

Harold Radford and Co., Ltd. have now taken over the controlling interest in Seary and McReady, Ltd. Mr. Harold Radford is the chairman and managing director and Mr. Nigel Sharpe and Mr. Brian Finnigan have been appointed directors.

The Lockheed Hydraulic Brake Co., Ltd. announce a reduction in the prices of their hydraulic brake fluid. The new prices for the containers are: Half pint, 3s (3s 2d previously); one pint, 5s 4d (5s 10d); quart, 9s 6d (10s 4d); gallon, £1 17s 6d (£2); five gallons, £8 5s (£9); 10 gallons, £16 10s (£18).

British competitors in the Monte Carlo Rally were well catered for at Clifton's Service Station, 59, Sidcup Road, Lee, London, S.E.12, who not only provided their usual all-night service, but also made light refreshments available to all competitors as they passed through on their way to Folkestone.

## INFORMATION SOUGHT

Correspondence, addressed c/o *The Autocar*, can be forwarded on behalf of readers seeking the following information and handbooks:—

**No. 15311.—1934 2 1/2-litre S.S.I.**

"K. H. R."—General information and a handbook.

**No. 15312.—Red Label Bentley**

"W. F."—All possible information and a handbook.

**No. 15313.—1938 D.K.W.**

"C. L. B."—Hints and tips on maintenance; also a handbook.

**No. 15314.—1934 Triumph Gloria**

"R. C."—Maintenance details and a handbook for the 10 h.p. model.

**No. 15315.—1937 Opel Cadet**

"I. W. F."—What are the possibilities of fitting another make of engine in this chassis? Experiences, and hints and tips would be appreciated. Also an Opel handbook.

**No. 15316.—1934-37 Triumph Gloria**

"T. B."—All possible information.

**No. 15317.—1939 Triumph Dolomite**

"J. F. S."—General maintenance details and a handbook.

**No. 15318.—1932 12 h.p. Invicta**

"R. H."—General information, valve timing and a handbook.

**No. 15319.—1933 Riley Nine Monaco**

"C. H. V-H."—Maintenance hints, spare parts list, and handbook.

**No. 15320.—Anzani and G.N.**

"D. P."—Any books or literature on the 1925 four-cylinder s.v. Anzani engine and the G.N. chassis.

**No. 15321.—1934-35 28.8 h.p. Raiton**

"R. S."—All possible information on maintenance, performance, tuning, etc. Also a handbook.

**No. 15322.—Supercharging Morris Eight**

"A. G. M."—All possible information, and comparative figures for both supercharged and unsupercharged 1949 models.

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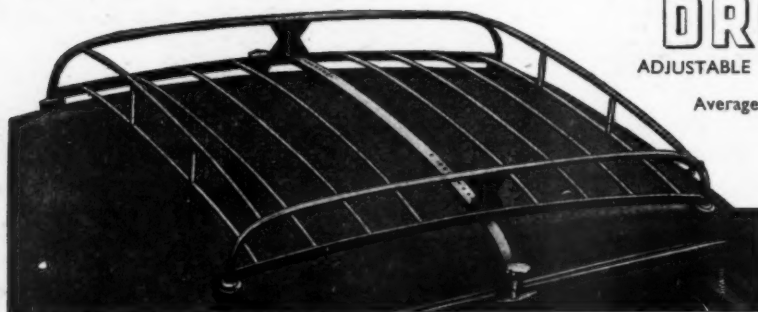
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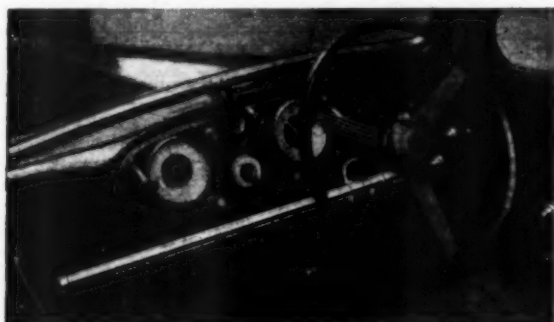
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1939	AUSTIN	Goodwood Saloon, black/blue, low mileage and in excellent condition	£495
1936	BENTLEY	3½ litre Park Ward Saloon, re-conditioned by makers, radio	£1,250
1949	HILLMAN MINX	Magnificent, black, 2,000 miles only, as new	£895
1939	JAGUAR	1½ litre Saloon, black, moderate mileage, in outstanding order	£525
1948	LEA FRANCIS	Sports 2 seater, 15,000 miles, radio	£925
1947	M.G.	1½ litre Saloon, black/red, as new	£875
1949	TRIUMPH	1,800 Saloon, black/beige, 2,000 miles only, quite as new	£1,250
1948	VAUXHALL	Wyvern Saloon, black/grey, radio, 5,000 miles, spare unused	£825

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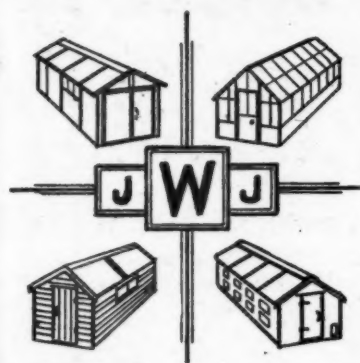
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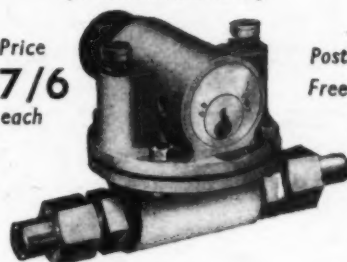
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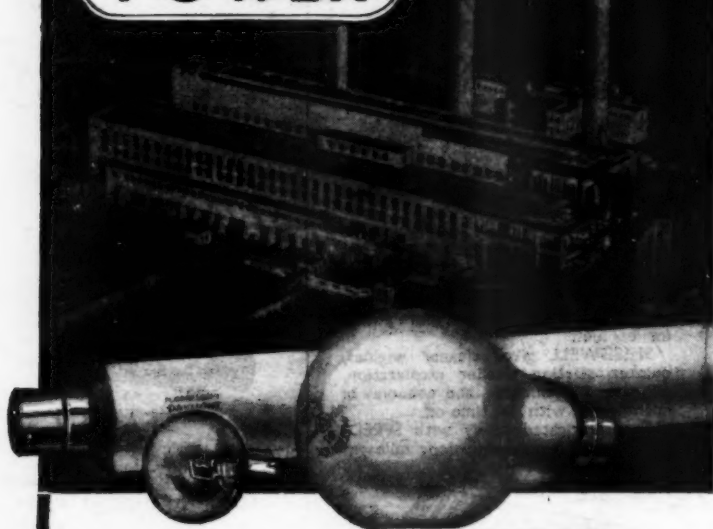
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**PARSONS CHAINS**

There's a Parsons Chain to fit every size and type of wheel. For regular motoring on treacherous road surfaces use Parsons Bar Reinforced Non-Skid Type DL fitted with tensioners to save wear and minimise noise. For emergencies use Parsons new All-Metal Emergency Tyre Grips—the grip that 'stays put'.



## 10,300 MILES IN 24 DAYS AUSTIN A70 BREAKS BRITAIN-TO-CAPE RECORD

Ralph Sleigh and Peter Jopling, driving an Austin A70 "Hampshire" saloon fitted with standard Lucas Electrical Equipment reached Cape Town from England in the remarkable time of 24 days, 2 hours, 50 minutes, for the 10,300 miles.



This beat the existing record (made in 1939, also using Lucas equipment) by well over a week! They also broke the ALGIERS-CAPE record by nearly four days! To achieve these outstanding records, meant averaging 450 miles per day over this most gruelling route via Boulogne, Marseilles, Algiers, across the Atlas Mountains, through the barren Sahara, Nigeria, French Equatorial Africa, Belgian Congo, Kenya, Tanganyika, Rhodesia, Transvaal and so to the Cape. "Road" conditions were encountered, a most emphatic testimony to the performance and reliability of the Austin A70 and its Lucas Electrical Equipment.

# LUCAS ELECTRICAL EQUIPMENT



CAPE TOWN, SOUTH AFRICA

JOSEPH LUCAS LTD • BIRMINGHAM • ENGLAND